SECTION 18. NETWORK ROUTER

18.1 General. The Network Router is a queue-driven data routing system. It moves SARSS data between computers with minimal operator assistance. The Network Router determines how data is moved between systems by using preprogrammed tables. To allow data transfer, the Network Router need only know what needs to be communicated and who is to receive it. The Network Router coordinates and accounts for data transfer throughout SARSS. The network includes SARSS2AC/B, SARSS2A, and all subordinate SARSS1s. Communications outside the network are also handled by the Network Router. This enables SARSS to communicate upward through the supply channels (to NICPs, LOGSA, LCA, etc.) and downward (to SAMS, SPBS-R, ULLS, etc.).

18.1.1 Network Router/BLAST Interface. The Network Router uses a communications software package called Blocked Asynchronous Transmission (BLAST) to transfer data. Both the Network Router and BLAST are capable of functioning as either a background process (no operator assistance) or an interactive process (with operator assistance). When the Network Router identifies a file that is capable of being transferred over telephone lines or network cables, it calls upon BLAST to establish the communication link and conduct the actual data transfer. The file being sent is held in the Network Router until a communication link is established to send the data. When the data arrives at the receiving SARSS1 computer, it again is held by the Network Router until read into the system and processed by the SARSS operator.

18.1.2 BLAST Communications. The communications software package called BLAST provides the ability to communicate with any other computer system running BLAST. In SARSS, BLAST may be configured in one of three modes: point-to-point (PTP), Combat Service Support Automated Information Systems Interface - Virtual End-to-End (CAISI-VEE), or File Transfer Protocol (FTP).

a. In non-wartime situations, SARSS1 can be set up to use any of the three configurations for communications with other SARSS activities. Transmission is decided by routing tables. SARSS1 communicates with SAMS, SPBS-R, and ULLS customers using BLAST PTP if it is implemented at these STAMIS; otherwise, diskettes are used.

(1) BLAST PTP can communicate with any type modem at any baud rate; however, you must enter the baud rate on the system according to the type modem being used. The system will automatically adjust itself to the best speed depending on the quality of the line and the speed of the slowest modem.

(2) Routing tables (see paragraph 18.2.3) indicate how SARSS1 communicates with an activity using BLAST PTP. If manual PTP is the communication type, a telephone number is not entered in the routing table. SARSS1 will wait for the receiving activity to make contact and then transfer files. Files to be transmitted are queued, awaiting contact by the manual PTP activity. If auto-dial PTP is the communication type, the receiver's telephone number is entered on the routing table, along with other data relating to when and how often the computer should attempt to send data.

b. In some situations SARSS users are required to communicate through the Combat Service Support Automated Information Systems Interface - Virtual End-to-End (CAISI-VEE). To accommodate this requirement, SARSS1 provides a special CAISI-VEE communications interface. When this interface is used, the system disables point-to-point BLAST background processing and communicates directly through the CAISI-VEE.

c. SARSS1 can also be configured to communicate over an external local area network (LAN) using the Transfer Control Protocol/Internet Protocol (TCP/IP) File Transfer Protocol (FTP). When this configuration is used, the SARSS1 system files are transferred at high speed over LAN cables.

18.2 Network Router Features. The Network Router consists of three service programs and five data files. Through the use of these, the Network Router monitors the request for and receipt of transfer data, and initiates the transfer. The Network Router maintains a history journal of each transfer action and provides status on transfer requests. The network is constantly monitored for availability of communications media. Network connection, STAMIS transfer requirements, data movement priority, data pending, and media preference are also monitored by the Network Router.

18.2.1 Outbound Data Transfers. SARSS output programs (Transactions-Out and Customer-Out Processes in SARSS1) send an outbound communications request for service to the Network Router to transfer data. A request for service may be made either by the system programming or by the SARSS1 operator. The Network Router uses tables containing routing, address, and media information to transfer the data. The SARSS1 operator may make only minimal changes to these tables (see paragraph 18.3.2).

a. When the Network Router receives a request for service, it scans the tables to determine specific routing instructions. From these tables, the Network Router is able to determine whether the outbound data must be written to diskette or whether it may be transferred over telephone lines or network cables. The Network Router is then able to set up the proper Communication Media Service (CMS).

b. The data to be transferred is then grouped according to destination ID and formed into a file. Header and trailer records are then placed at the beginning and end of the file to allow for specific file identification.

c. The CMS is the application that actually accomplishes the data transfer. Transfer actions and the status of the transfers are posted to a SARSS Network Router History Journal and a CMS Log. The journal or log may be reviewed at any time (see paragraph 18.3.5).

d. At the actual time of transfer, a sequence number and file ID are assigned, beginning with 00001, for each specific destination address. The sequence number increases by 1 each time data is sent to that destination address.

e. A sequence check (see paragraph 18.4) at the receiving destination ensures that transfers are received and/or processed in the proper sequence. This sequence check is accomplished using a Sequence Check Table which indicates the last sequence number received by the destination system.

18.2.2 Inbound Data Transfers. Network Router inbound data transfers begin with the receipt of transferred data. The CMS begins processing the data file by verifying the trailer record and the received file. (Files received by commo have no header records.) The receiving CMS sends a confirmation message back to the sending CMS. The Network Router receives the data and posts status to the Network Router Request Queue. The Network Router then clears the CMS Queue and determines the proper routing by checking whether the destination ID is for the receiving SARSS activity.

a. If the data is meant for your SARSS activity, the data goes to a Network Router Hold File waiting for the Transactions-In Process to be run (see section 5).

b. If the data received has a destination ID other than your SARSS activity, the data file received is deleted.

18.2.3 Network Router Configuration. The Network Router service requires proper loading of the Network Router Tables (Routing, Address, and Media) for proper operation. The building and loading of these tables is the responsibility of the system administrator.

a. The Media Service Table within the Network Router has a record for each queue used by the CMS. Each record on this table has a Media Code and queue name. The queue name must be described in the queue index and known to the queue manager. Manual activities are not affected by the Network Router. Output is produced on printed reports.

b. The Routing Table Records can vary depending on the options used. Each outbound file ID must have a routing record and media type, but an inbound file ID needs only an inbound routing record.

c. The Network Router programs may be executed from batch by the system or interactively from an action line. The Network Router Install commands load their respective programs as background processes each time the SARSS1 computer is turned on and SARSS1 is loaded. No commands are required by the operator to load the Network Router programs.

18.3 COMMO Menu Processes. The SARSS1 Communication Menu lists the processes available for communications in SARSS1. The selections deal with establishing parameters for input and output of data through the use of BLAST and Network Router applications. To access this menu on your system, enter **COMMO** on the action line and press <Esc>. The screen in figure 18.3-1 appears.

```
DATE: MM/DD/YY                  SARSS1 COMMUNICATION  MENU                  TIME: HH:MM:SS

                    COMMAND                  PROCESS
                    +++++++++          ++++++++++++++++++++++++++

                    SNR                <=== RESTART SARSS-1 SNR PROCESS

                    UPDRT              <=== UPDATE ROUTING TABLE ENTRY

                    CCOMMO             <=== CONFIGURE COMMUNICATIONS

                    QMON               <=== MONITOR QUEUE ENTRIES

                    LOGUTIL            <=== LOG UTILITIES

                    BLDSTBL            <=== BUILD ADDRESS/CMS TABLES

                    FTPUTIL            <=== FTP UTILITIES



ACTION:                 <=== ENTER COMMAND TO SELECT YOUR PROCESS                SCREEN 0017
<HOME>=HELP             MENU = PREVIOUS MENU; SMM = SARSS MASTER MENU; LOGOUT = QUIT
```

Figure 18.3-1. SARSS1 Communication Menu

18.3.1 Restart SARSS-1 SNR Process (SNR). The first selection on the SARSS1 Communication Menu, Restart SARSS-1 SNR Process, is used to restart or clean up any remaining queue entries created by the Transactions-Out or Customer-Out Process. The selection produces any unfinished

output from these processes onto the correct media (communications or diskette). This process must be run at the file server.

a. To restart the Network Router Process, enter **SNR** on the action line and press <Esc>. The system begins scrolling the Network Router Processing screens, beginning with the Media Processing screen.

b. The system begins checking the Network Router Queue at this time to see if there are any files to be processed.

(1) If there are files present to be output on diskette, the screen in figure 18.3-2 appears. This occurs when the files present for processing are destined for an activity loaded on the Network Router Tables.

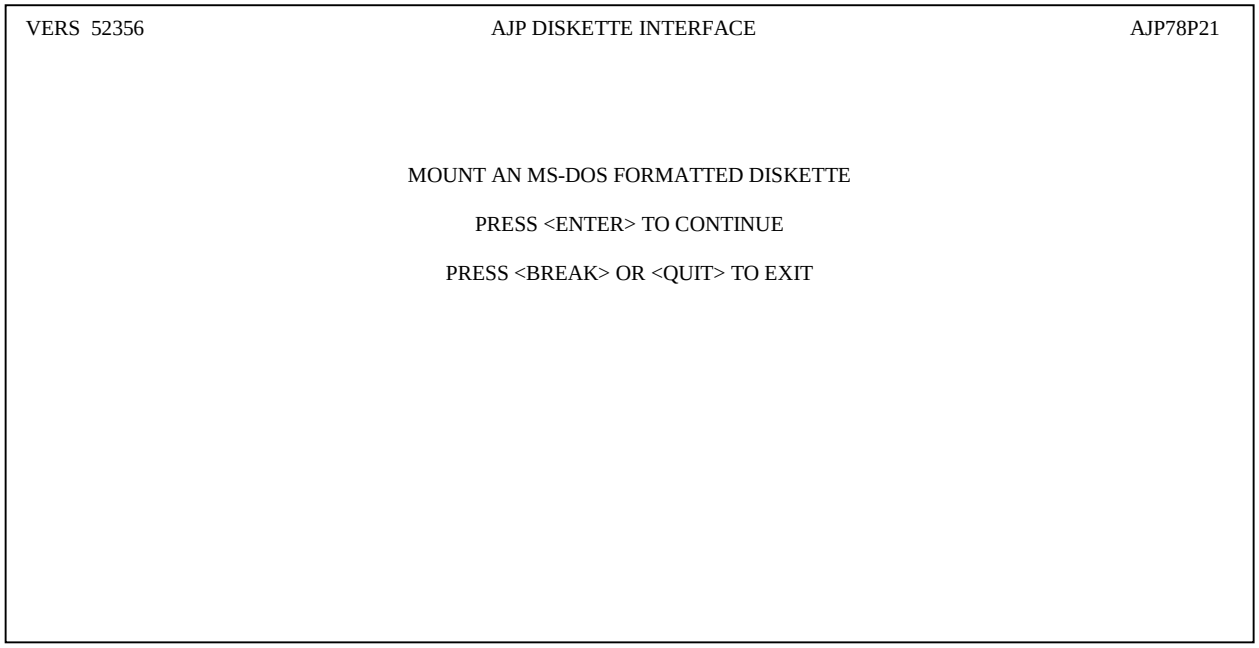

Figure 18.3-2. Mount a Formatted Diskette Screen

(2) If the queue contains files for which there is no Network Router Table, the screen in figure 18.3-3 appears. This screen allows you to build a Network Router Table entry for the destination RIC or DODAAC. Refer to paragraph 18.3.2 for details on completing this screen.

```
DATE: MM/DD/YY                    CREATE ROUTING TABLE                    TIME: HH:MM:SS

      SOURCE..... WTUTRA      DESTINATION..... WAL          FILEID..... AJH82

      COMMUNICATION TYPE:  DISKETTE (D)
      /POINT TO POINT  (P)  /CAISI-VEE  (V)  /FTP  (F)

      FOR POINT TO POINT (PTP) ENTER:
            TELEPHONE NUMBER OR M FOR MANUAL PTP:

                  MAX ATTEMPTS:  00010 START TIME:  0000

      IF CAISI-VEE WAS SELECTED ENTER:
            DESTINATION ADDRESS OR (M) FOR MANUAL:

NOTE: THE ABOVE INFORMATION IS REQUIRED TO BUILD A ROUTING TABLE ENTRY.

                              PRESS <ESC> TO CONTINUE




                                                                    SCREEN 1705
```

Figure 18.3-3. Create Routing Table Screen

c. If no error situations are encountered during processing, the Media Processing screen reappears. The Network Router again checks to see if any input transactions have been received during Network Router processing.

d. If files are present, the Mount a Formatted Diskette screen reappears. If no files are found, the Communication Menu (figure 18.3-1) reappears. At this time, the Network Router is turned off as an active process and returned to the background partition. The SNR Restart is now complete; all Network Router queues should now be in the process of being transmitted to the destination RICs or DODAACs.

18.3.2 Update Routing Table Entry (UPDRT). This is the second selection on the Communication Menu. The following subparagraphs discuss how to update routing table entries for activities with whom you communicate.

a. Use the Update Routing Table Entry selection to delete a routing table, change the media or telephone number, or remove an entry that is not required.

b. To make a change to a routing table, enter the command **UPDRT** on the action line and press <Esc>. The screen in figure 18.3-4 appears. This screen is divided into three parts.

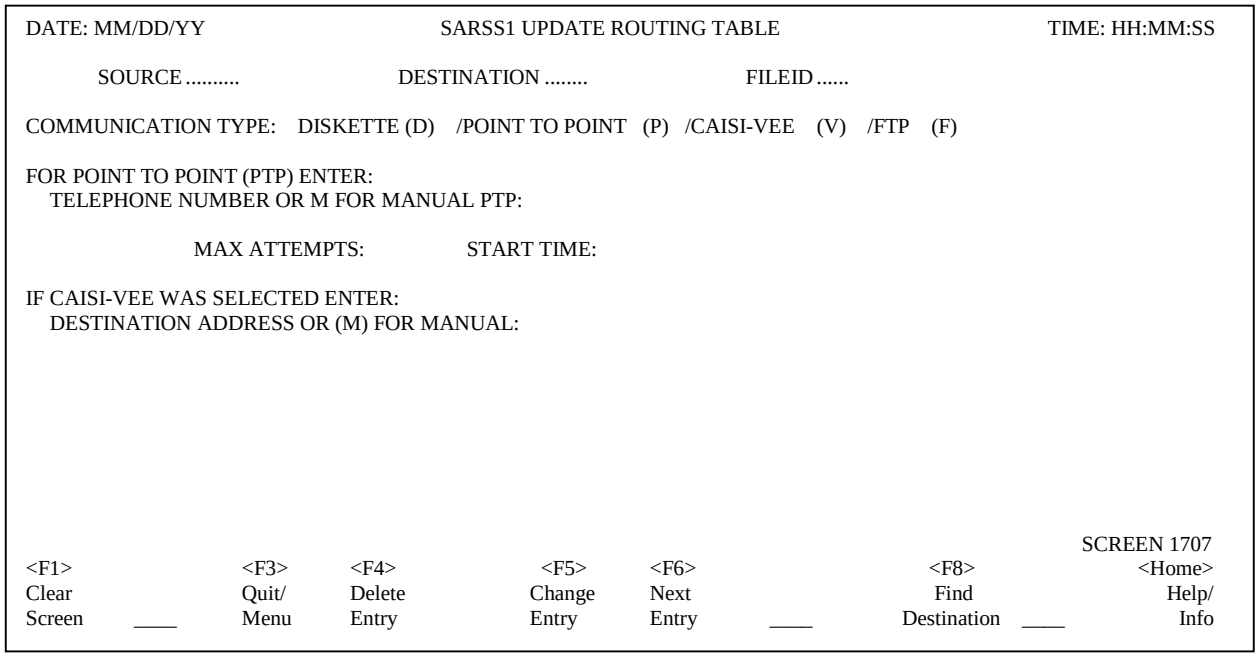

Figure 18.3-4. SARSS1 Update Routing Table Screen

(1) The top portion of the SARSS1 Update Routing Table screen contains the following identification information:

(a) SOURCE: This field contains the SSA's RIC as the source of the file to be transferred.

(b) DESTINATION: This field identifies the intended receiver of the file to be transferred. This entry may appear as either a RIC or a DODAAC.

(c) FILEID: This entry shows the ID of the file to be transferred.

(2) The second portion of the update screen contains information describing how the routing table is currently built. You can make changes in this portion.

(a) COMMUNICATION TYPE: This field identifies the output medium currently set for this destination RIC. Entries may be diskette (D), point-to-point (P), CAISI-VEE (V), or FTP (F). If F is entered, the system displays the FTP User screen to allow input of FTP network data.

(b) TELEPHONE NO: When using manual PTP, enter M in this field. If the field is blank, the system is set for manual PTP. To set the system to use the auto-dial mode, enter the destination telephone number exactly as you would normally dial it. When using diskette as the output medium, no entry is necessary in this field.

(c) MAX ATTEMPTS: If auto dial is being used, enter the maximum number of times you want the system to attempt to send during the time allotted. The system default is 10.

(d) START TIME: Enter the time you want the system to start sending data when using the auto-dial mode. If this field is blank or zero-filled, the system will begin file transfer immediately.

(e) MAX PROCESS TIME: Enter the length of time you want the system to continue its attempts to send data when using auto dial. The default is 12 hours.

(f) DESTINATION ADDRESS (CAISI-VEE): If the communication type selected is V for CAISI-VEE, the address of the receiving activity must be entered here. If SARSS1 will not initiate communication sessions with the receiving activity, M is entered in the destination address field. The M entry causes the system to queue transactions for that activity until the receiving unit makes a communication connection with SARSS1. Once the connection is established, the system will transfer the data in the queue.

(3) The third portion of the screen includes the function keys assigned for use with this screen.

(a) <F1>-Clear Screen: This key is used to clear the screen of all data, but does not clear the routing table.

(b) <F3>-Quit/Menu: Press this key to exit UPDRT and return to the SARSS1 Communication Menu.

(c) <F4>-Delete Entry: Press this key to delete the entire Routing Table Record that is displayed.

(d) <F5>-Change Entry: Press this key to record any changes made in the upper portion of the screen. A message indicating that the change was accepted appears in the lower-left corner of the screen.

(e) <F6>-Next Entry: Press this key to scroll through all the Routing Table Records on the system.

(f) <F8>-Find Destination: Use this function key to find the RIC or DODAAC entered in the DESTINATION field.

18.3.3 Configure Communications Menu (CCOMMO). The Configure Communications selection, the third option on the SARSS1 Communication Menu, provides a menu with processes that let you review and update the BLAST Configuration Files.

a. Enter **CCOMMO** on the action line and press <Esc> to access the SARSS1 Configure Communications Menu. The screen in figure 18.3-5 appears.

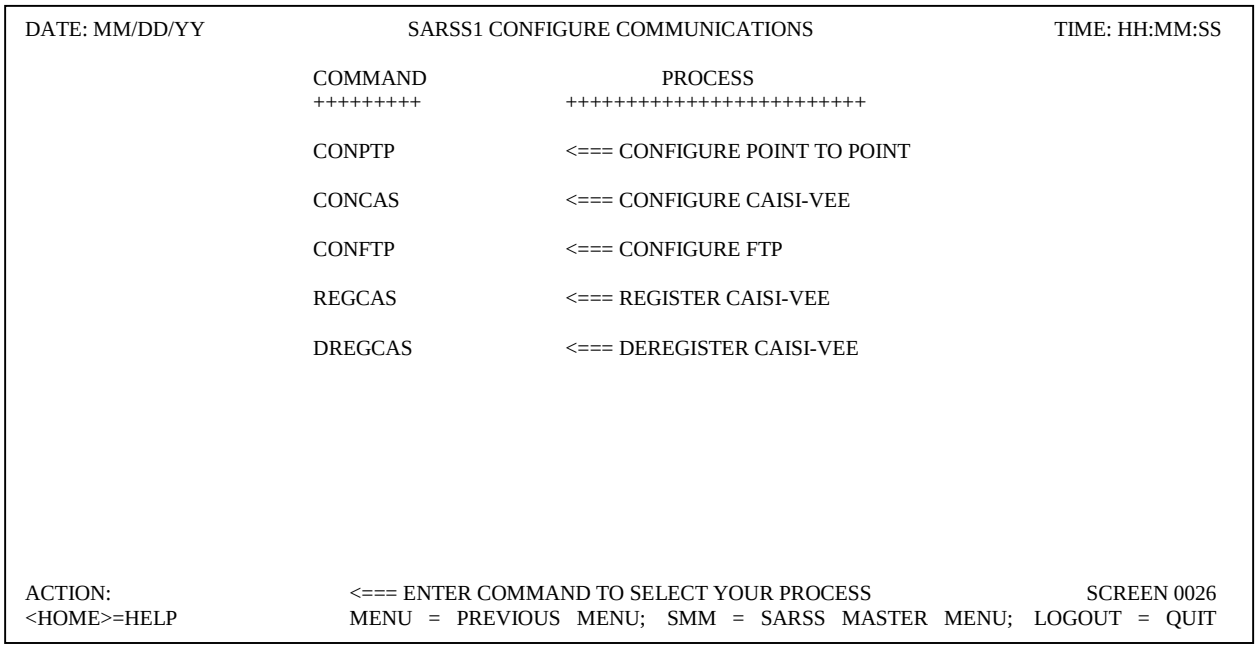

Figure 18.3-5. SARSS1 Configure Communications Menu

b. The first selection provides access to the BLAST PTP Configuration File. To review or update this file, enter **CONPTP** on the action line and press <Esc>. The screen in figure 18.3-6 appears.

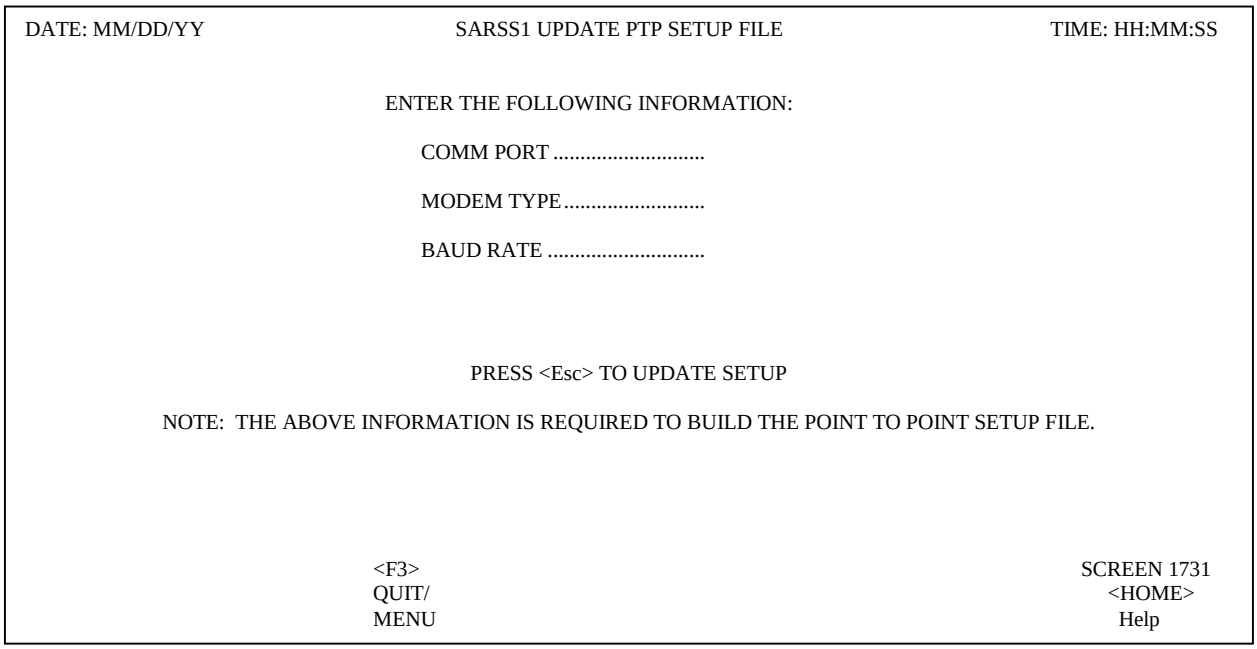

Figure 18.3-6. SARSS1 Update PTP Setup File Screen

c. The three entries on this screen are also on the BLAST Concentrator Configuration screen.

(1) COMM PORT: This data identifies which hardware communication port you are currently using for communication.

(2) MODEM TYPE: This data identifies the type of modem you are using with BLAST.

(3) BAUD RATE: This number identifies the baud rate at which your modem operates. Do not use a baud rate that is not compatible with your modem.

d. To update any entry, enter the new data and press <Esc>. Use the <F3> key to exit the process when you finish reviewing the file and do not want to make changes.

e. The second selection, CONCAS, allows you to enter the data necessary to configure the CAISI-VEE setup file. Enter **CONCAS** on the action line and press <Esc>. The screen in figure 18.3-7 appears.

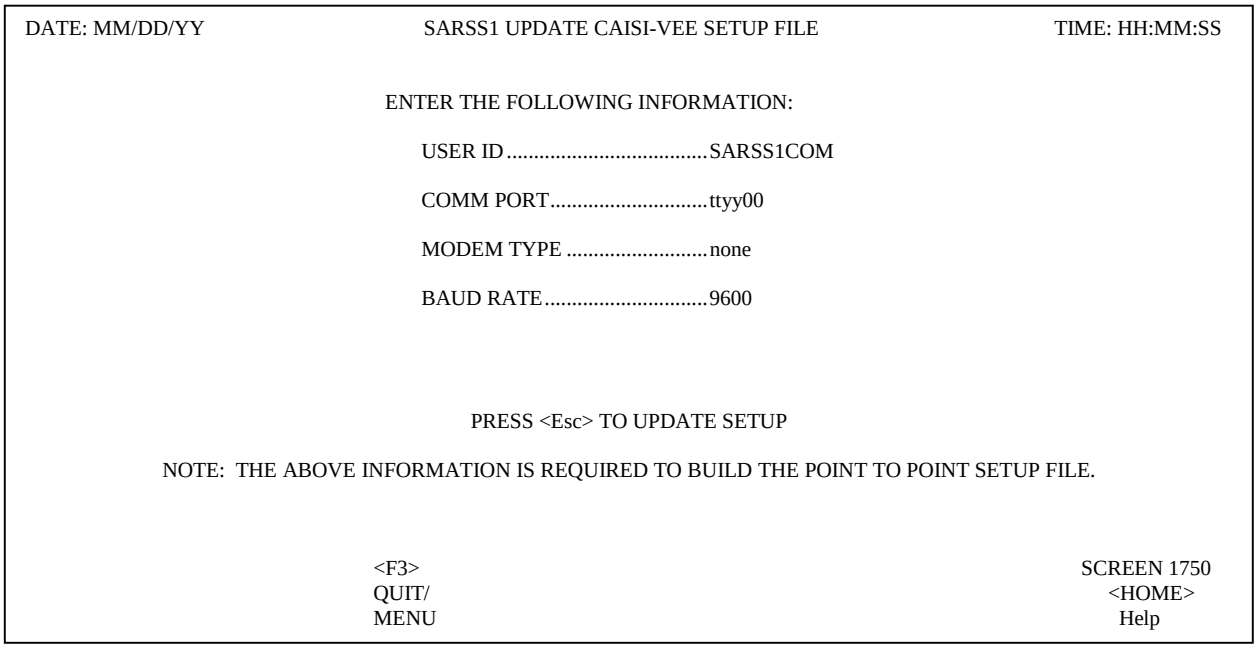

Figure 18.3-7. SARSS1 Update CAISI-VEE Setup File

(1) You may change any of the entries, but they must conform to the edit criteria for that particular field. For all entries except USER ID, you may utilize data element Help by placing the cursor on the field and entering a "?".

(a) USER ID - The name assigned to your activity for communications through CAISI-VEE.

(b) COMM PORT - This entry is used to identify which communications port you will be using during your BLAST session. Valid ports are ttyy00 or ttyy01.

(c) MODEM TYPE - This entry is used to identify the type of modem you are using for BLAST. The modem used must be one of the types displayed when you access Help by placing the cursor in the data entry field and entering a "?".

(d) BAUD RATE - This entry is used to identify the baud rate at which your modem operates. DO NOT enter a baud rate that is incompatible with your modem. Valid baud rates can be displayed by placing the cursor in this field by entering a "?".

(2) After entering the necessary data, press <Esc>. The system displays a message indicating that changes have been made and directs you to press <Esc> again to return to the SARSS1 CONFIGURATION MENU.

f. The third selection, CONFTP, allows you to configure the FTP communications package. (See paragraph 18.5.5.)

g. The fourth selection, REGCAS, allows you to register your system on the assigned CAISI-VEE system. This must be done before you attempt to use CAISI-VEE for communication. Enter **REGCAS** on the action line and press <Esc>. The BLAST screen as shown in figure 18.3-8 appears.

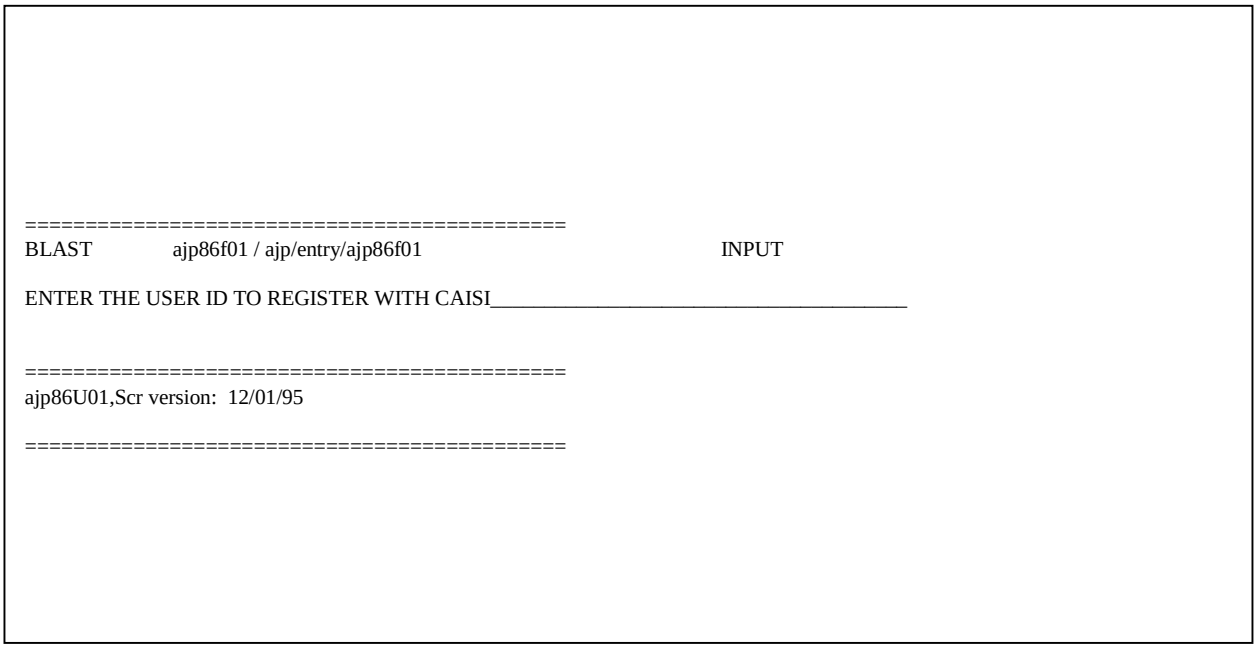

Figure 18.3-8. BLAST User ID Entry (Register) Screen

(1) To register your system, enter the USER ID and press <Esc>.

(2) Once you have pressed <Esc>, the system returns to the SARSS1 CONFIGURATION MENU.

h. The fifth selection, DREGCAS, allows you to de-register your system from the assigned CAISI-VEE system. Enter **DREGCAS** on the action line and press <Esc>. The BLAST screen as shown in figure 18.3-9 appears.

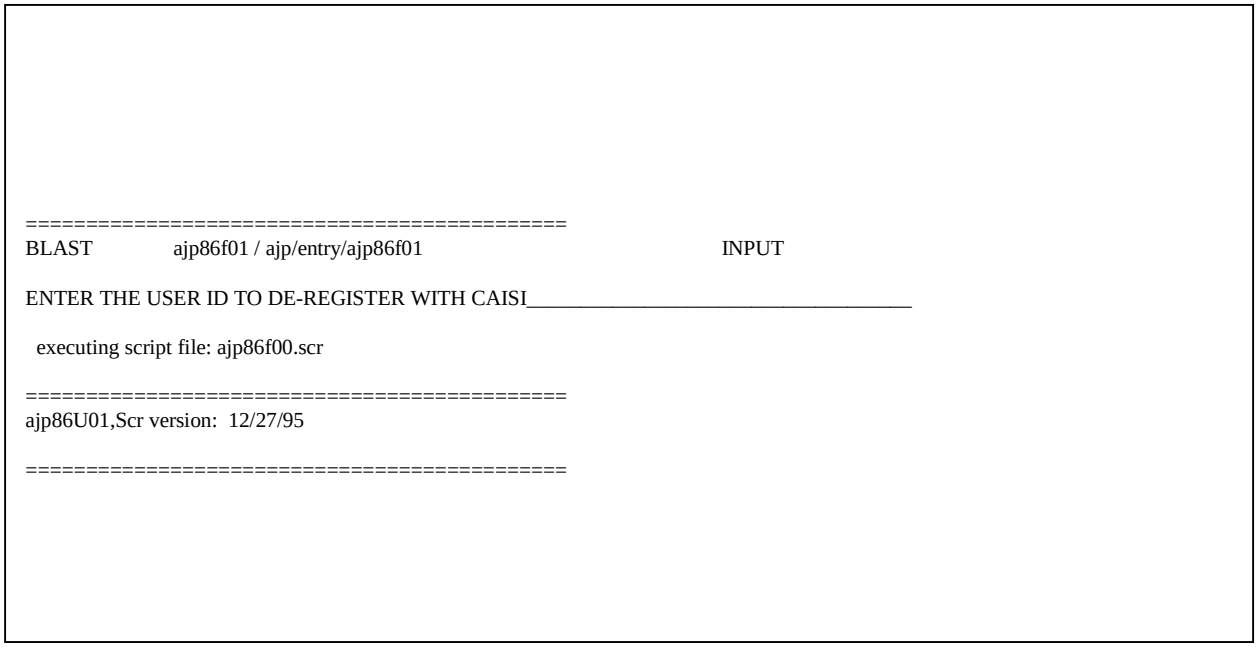

Figure 18.3-9. BLAST User ID Entry (De-Register) Screen

(1) To de-register your system, enter the USER ID and press <Esc>.

(2) After pressing <Esc>, the system returns to the SARSS1 CONFIGURATION MENU.

18.3.4 Monitor Queue Entries (QMON). This is the fourth selection on the SARSS1 Communication Menu. It allows you to display communication queue entries and their current status. You have the option of displaying SNR, PTP, CAISI-VEE, FTP, or Diskette Queue entries.

a. Enter **QMON** on the action line and press <Esc>. The screen in figure 18.3-10 appears.

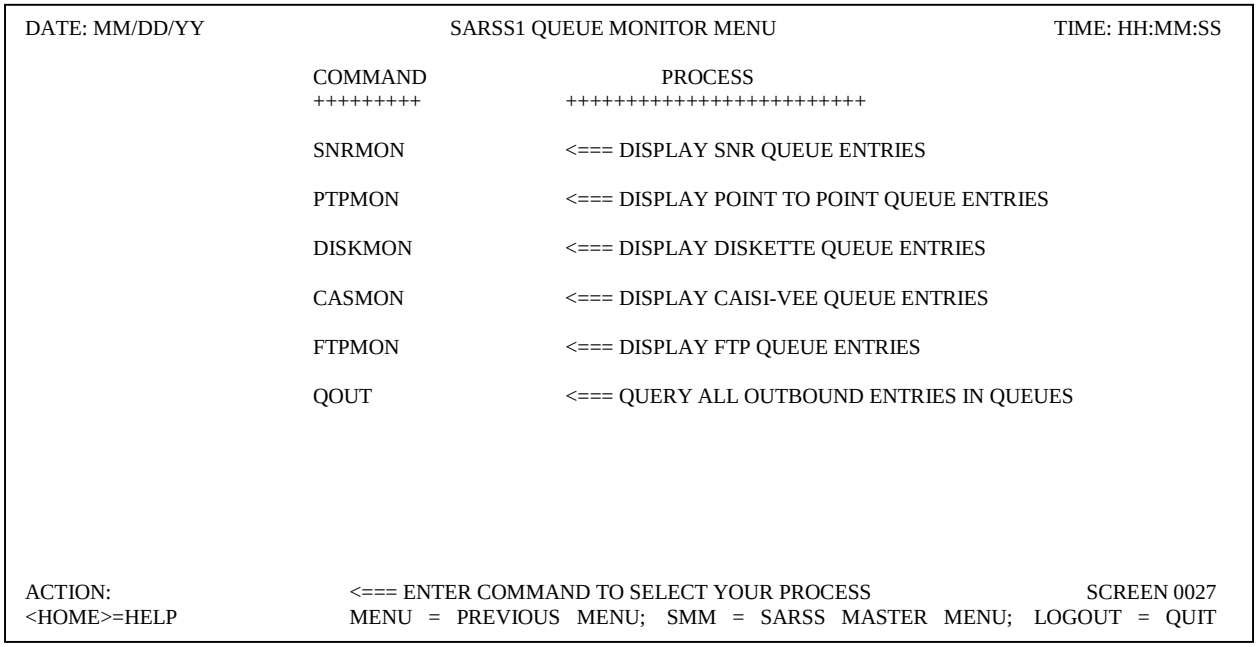

Figure 18.3-8. SARSS1 Monitor Queue Entries Screen

b. To access any of the six queue monitor selections, enter the appropriate command on the action line and press <Esc>.

18.3.4.1 Display SNR Queue Entries. This is the first of the display queue entries options. It allows you to display all Network Router Queue entries currently on the system and their current status.

a. To view the current SNR Queue entries, enter **SNRMON** on the action line and press <Esc>. The screen in figure 18.3-11 appears.

```
DATE: MM/DD/YY                  SARSS1 SNR QUEUE MONITOR                  TIME: HH:MM:SS

                    SNR FILE..... Y          TARGET RECEIVE..... Y
                    FILEID ..... AJTS9A      BACKUP..... Y
                    SOURCE ..... WAE         CMS ..... A
                    DESTINATION..... AWB     TARGET ..... AWB
                    STATUS DATA:             SEQUENCE CHECK:
                      STAMP ..... 080890141402   INDICATOR..... Y
                      STATUS ..... X             NUMBER ..... 00021
                      COMMENT ..... TERMINAL STATUS OCCURRED

                REMARKS ..... WAE TO AWB

          SOURCE FILE SPEC ..... [SYS]<SARSS1>FILES>AJTS9AAWB902200926

          DESTINATION FILE SPEC..... [SYS]<SARSS1>FILES>AJTS9AAWB902200926

                                                                    SCREEN 1710
                    <F3>                <F6>                        <Home>
                    Quit/               Next                        Help/
____  ____  ____   Menu   ____  ____    Entry  ____  ____  ____     Info
```

Figure 18.3-11. SNR Queue Monitor Screen

b. A brief explanation of the fields contained on this screen follows:

(1) SNR FILE: Values are Y for a file created as a Network Router File or N for a file not created as a Network Router File.

(2) TARGET RECEIVE: Signifies whether the target destination RIC is on the Network Router Table (Y) or not (N).

(3) FILEID: This is a generic file identification describing the contents of the file. It is included in the Network Router trailer with the file. Possible values are:

(a) AJRC1D - Catalog-In File (input and output).

(b) AJRC01 - SNRF-In File (input and output).

(c) AJU091 - Transactional input (from CTASC-II).

(d) AJTS9A - Transactional input (from SARSS1).

(e) AJT159 - CQD (delete Catalog Record) from SARSS2A.

(f) AJQ091 - Transactional output (from SARSS2A).

(g) AJH80 - Input from DAAS.

(h) AJTS9B - Transactional output (from SARSS1 to higher supply source).

(4) BACKUP: A Y indicates a backup will be created; an N signifies no backup will be produced.

(5) SOURCE: This is the address of the sender of the file. Valid entries are RIC, DODAAC, or UIC. For routing table entries built for files to be sent from this site, your RIC will appear in this field. For files your system will receive, the applicable SARSS2A, SARSS2B, other SARSS1, or DAAS assigned RIC will appear in this field.

(6) CMS: Communication media service. This contains the values associated with the Network Router CMS Table. For outbound entries, A indicates BLAST; C indicates floppy diskette. For inbound entries, C indicates disk movement.

(7) DESTINATION: This field contains the address to which the file will be sent. A RIC, DODAAC, or UIC is a valid entry. For files received by your system, your RIC will appear. For files being sent, the applicable destination RIC will appear.

(8) TARGET: This is the target (final) receiver of the file. It is usually the same as the DESTINATION field.

(9) STATUS DATA fields:

(a) STAMP: This is the date-and-time group identifying when the Network Router request was created. It is shown as 080790223745. It is broken down as 08 = month, 07 = day, 90 = year, 22 = hour, 37 = minutes, 45 = seconds.

(b) STATUS: The status of the data transfer is shown in this field. Refer to table 6.3-1 in the SARSS1 UM for an explanation of Status Codes.

(c) COMMENT: An in-the-clear message of the current status of the transmission.

(10) SEQUENCE CHECK fields:

(a) INDICATOR: This indicates sequence number checking on incoming files or sequence number assignment on outgoing files. A Y indicates sequence number checking is required; an N indicates no.

(b) NUMBER: Indicates the latest sequence number assigned to the outgoing request or the last sequence number received from the source. It is recommended that an informal log of incoming sequence numbers by source be kept should problems in sequencing occur (see paragraph 18.4.2).

(11) REMARKS: This field includes the RIC From or if going to SARSS1, SARSS2A, or SARSS2B, the RIC To. If the file is either from or to a customer, it contains the DODAAC.

(12) SOURCE FILE SPEC: This field includes the header file assigned to the data transfer. It appears as "[SYS]<SARSS1>FILES>AJTS9BHR2902192017." Breakdown of the header file is:

(a) [SYS]<SARSS1>FILES> = Volume, directory, and file that created the output data.

(b) AJTS9B = Transactional file output designation.

(c) HR2 = Destination RIC.

(d) 90219 = Ordinal date indicating 219th day of 1990.

(e) 20 = The hour the header file was created.

(f) 17 = The minute the header file was created.

(13) DESTINATION FILE SPEC: This field includes the trailer file assigned with the data transfer. Breakdown of the trailer file is as shown in (12) above.

(14) <F3>-Quit/Menu: Designates the function key to be pressed to quit SNRMON.

(15) <F6>-Next Entry: Designates the function key to be pressed to scan the next screen in the Network Router Monitor.

c. After all screens in the Network Router Queue Monitor have been displayed, the blank screen shown in figure 18.3-12 appears. Press <F3> to return to the menu.

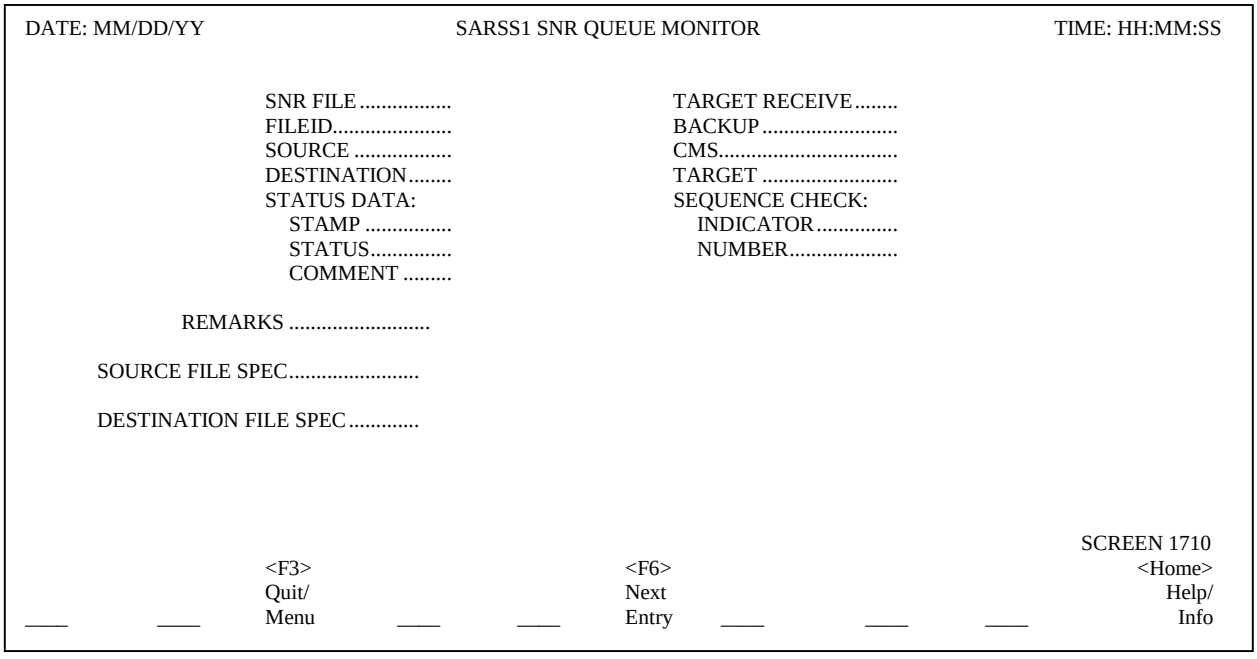

Figure 18.3-12. End of SNR Queue Entries Message Screen

18.3.4.2 Other Display Queue Entries. The other queue entry options display the current status of queue entries for the applicable communication type.

a. To review the Display Point-to-Point Queue Entries selection, enter **PTPMON** on the action line and press <Esc>. The screen in figure 18.3-13 appears. This screen allows you to view all entries queued for transmission.

```
DATE: MM/DD/YY                SARSS1 PTP QUEUE MONITOR                TIME: HH:MM:SS

                    FILEID .....                ENTRY STATUS.....
                    SOURCE .....                LAST ACTIVITY.....
                    DESTINATION.....            SEQUENCE NUMBER ..
                    PHONE NUMBER
          SOURCE FILE SPEC.....
          DESTINATION FILE SPEC.....
  FIRST CHANCE DATE/TIME.                       MAX ATTEMPTS:
  LAST CHANCE DATE/TIME..
  LAST STATUS DATE/TIME..                       ATTEMPTS:

                          End Of PTP Queue Entries

                                                                  SCREEN 1734
                    <F3>                <F6>                        <Home>
                    Quit/               Next                        Help/
____  ____        Menu  ____  ____      Entry  ____  ____  ____      Info
```

Figure 18.3-13. SARSS1 PTP Queue Monitor Screen

b. Use <F3> and <F6> as needed.

c. The screens for the remaining selections, Display Diskette Queue Entries (DISKMON), Display FTP Queue Entries (FTPMON), and Display CAISI-VEE Queue Entries (CASMON) are similar to the screen in figure 18.3-13.

18.3.5 Log Utilities (LOGUTIL). This is the fifth selection on the SARSS1 Communication Menu. It provides access to a submenu with eight processes. These processes allow you to query, clear (where applicable), or print any of the various communication logs maintained by the system. To access the SARSS1 Communication Log Utilities Menu, enter **LOGUTIL** on the action line and press <Esc>. The screen in figure 18.3-14 appears.

```
DATE: MM/DD/YY          SARSS1 COMMUNICATION LOG UTILITIES          TIME: HH:MM:SS


                    COMMAND              PROCESS
                    +++++++++            ++++++++++++++++++++++++++

                    PSNRLOG              <=== PRINT SNR JOURNAL LOG

                    CSNRLOG              <=== CLEAR SNR JOURNAL LOG

                    PCMSLOG              <=== PRINT CMS LOG

                    CCMSLOG              <=== CLEAR CMS LOG

                    PINLOG               <=== PRINT INPUT LOG

                    QINLOG               <=== INQUIRY INPUT LOG

                    POUTLOG              <=== PRINT OUTPUT LOG

                    QOUTLOG              <=== INQUIRY OUTPUT LOG


ACTION:             <=== ENTER COMMAND TO SELECT YOUR PROCESS          SCREEN 0028
<HOME>=HELP         MENU = PREVIOUS MENU; SMM = SARSS MASTER MENU; LOGOUT = QUIT
```

Figure 18.3-14. SARSS1 Communication Log Utilities Menu

18.3.5.1 Print SNR Journal File (PSNRLOG). Use this selection to print the contents of the SNR Journal File.

a. The SNR Journal File is an indexed file. It contains a history journal of all actions taken on a data transfer request. It provides status of actions taken by the Network Router. The status is represented by a single-character (alphabetic) code and may serve as a history or audit trail for each request to the Network Router for data transfer. Although it can run at any time, only initiate this process when directed by the network administrator or the USAISSDCL Customer Assistance Office. Depending on the size of the file, it may require considerable time to run.

b. To print the SNR Journal File, enter **PSNRLOG** on the action line and press <Esc>. The printer will begin printing the SNR Journal File (figure 18.3-15).

```
+))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))),
*  Individual                         Alpha                                                                *
* File History                        Status                                                               *
*    Entry                             Code                                                                *
*      T                                T                                                                  *
*      *     +))))))))))))))))))))))))))3))))))))))))))))))))))))))))))))))))))))))))))))))))))),      *
*      *     *                          *                                                        *      *
*      * +))3)))))Q                     *                                                        *      *
*      * *   *  ID:AIR       050590082209*Org ID:AIR 050590082042         Src Ric:AIR     Dst Ric:S2B  *      *
*      * *   *  Status Code:   66*(B)*Stamp:050590082223 Disc:  REQUEST COMPLETED                      *      *
*      .>1   *  Seq Ind:Z  Seq Num:00003  File Size:000000001                                          *      *
*        *   *  Actv: 69 (E) CMS: 67 (C) FileID:AJTS9B Comments:AIR          TO                        *      *
*        *   *  Src  File:[SYS]<SNR>W4MAIN>050390155242                                                *      *
*        *   *  Dest File:[SYS]<SARSS1>FILES>AJTS9B>AIR>050590082042                                   *      *
*        .))3)))))Q                                                                                    *      *
*            *  ID:AIR       050590082042 Org ID:                         Src Ric:S2B     Dst Ric:AIR  *      *
*            *  Status Code:   74 (J) Stamp:050590082244 Disc:  DATA RECEIVED                          *      *
*            *  Seq Ind:Z  Seq Num:00003  File Size:000000001                                          *      *
*            *  Actv: 71 (G) CMS: 67 (C) FileID:AJTS9B Comments:AIR          TO                        *      *
*            *  Src  File:[SYS]<SNR>W4MAIN>050390155242                                                *      *
*            *  Dest File:[SYS]<SARSS1>FILES>AJTS9B>AIR>050590082042                                   *      *
*            *                                                                                         *      *
*            *  ID:AIR       050590082346 Org ID:                         Src Ric:AIR     Dst Ric:S2A  *      *
*            *  Status Code:    0 (A) Stamp:050590082347 Disc:                                         *      *
*            *  Seq Ind:   Seq Num:00003  File Size:000000001                                          *      *
*            *  Actv: 71 (G) CMS:  0 ( ) FileID:AJTS9B Comments:AIR          TO                        *      *
*            *  Src  File:[SYS]<SNR>W4MAIN>050390155242                                                *      *
*            *  Dest File:1551.SAM                                                                     *      *
*            *                                                                                         *      *
*            .)))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))-      *
*                                                                                                          *
*                                                                                                          *
.))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))-
```

Figure 18.3-15. SNR Journal File Printout

c. The network administrator or technical personnel may use this printout to determine the status of the data transfer. A listing of these Status Codes can be found in the SARSS1 Users Manual, Section 6.

<u>18.3.5.2 Clear SNR Journal File (CSNRLOG)</u>. This is the second selection on the Communication Log Utilities Menu.

a. Use Clear SNR Journal File selection to clear (purge) the SNR Journal File from the system. This selection should not be used unless specifically instructed to do so by the network administrator or the USAISSDCL CAO. The SNR Journal File is automatically purged every ten days when Close-Out is run.

b. To clear the SNR Journal File, enter the command **CSNRLOG** on the action line and press <Esc>.

<u>18.3.5.3 Print CMS Log (PCMSLOG)</u>. This is the third selection on the Communication Log Utilities Menu.

a. The Print CMS Log selection is used to print the CMS Log. This allows the operator to review various entries (e.g., Sequence No, File ID, Dest, File size). Do not use this selection unless specifically instructed to do so by the USAISSDCL CAO or the network administrator.

b. When instructed to print the CMS Log, enter the command **PCMSLOG** on the action line and press <Esc>. The printer will then begin printing the Communications Media Service Log (figure 18.3-16).

```
MM/DD/YY COMMUNICATIONS MEDIA SERVICE LOG

040891103335:  Seq No:   Sic: AJT  File Id: AJTS9A Src: AIR    Dest: S2B
               Dest File Spec:[SYS]<SNR>AIR>040891103320
               Src  File Spec:[SYS]<SARSS1>FILES>AJTS9AS2B910981031
               File Size 000000044    Status DTG: 040891103320  Status: Compltd
               Queue Name: LCCONTROL       Addr: DSKCPY
               Org Id: AIR   040891103315  Cmnt:  SOURCE TO SNR
               Actv: BACKUP

040891103345:  Seq No:   Sic: AJT  File Id: AJTS9A Src: AIR    Dest: SAR
               Dest File Spec:[SYS]<SNR>AIR>040891103337
               Src File  Spec:[SYS]<SARSS1>FILES>AJTS9ASAR910981031
               File Size 000000001    Status DTG: 040891103337  Status: Compltd
               Queue Name: LCCONTROL       Addr: DSKCPY
               Org Id: AIR   040891103334  Cmnt:  SOURCE TO SNR
               Actv: BACKUP
```

Figure 18.3-16. Communications Media Service Log Printout

18.3.5.4 Clear CMS Log (CCMSLOG). This is the fourth selection on the Communication Log Utilities Menu.

a. The Clear Communications Media Service (CMS) Log selection clears the CMS Log. Do not use this selection unless told to do so by the network administrator or the USAISSDCL gives specific instructions to do so.

b. To clear the CMS Log, enter **CCMSLOG** on the action line and press <Esc>.

18.3.5.5 Print Input Log (PINLOG). This selection allows you to print the Input Log. This log includes information about all files which have been input during the last 10 days. The log is automatically printed at the end of Close-Out. Data that has been in the log for more than 10 days is purged during each Close-Out.

a. To print the Input Journal Log, enter **PINLOG** on the action line and press <Esc>. The next screen allows you to select how the log will be printed (figure 18.3-17).

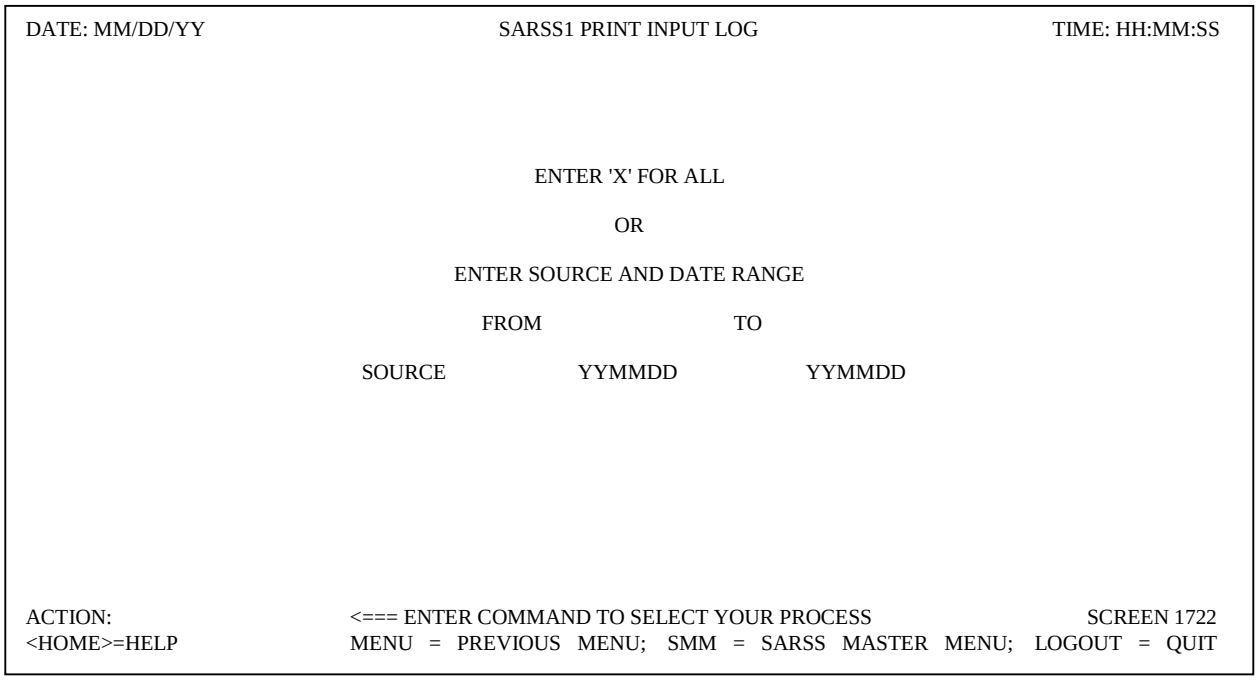

Figure 18.3-17. Print Input Log Option Screen

b. The log can be printed for various selections.

(1) SOURCE: Enter the DODAAC or RIC of an activity to get a printout of all files which have been sent from that activity.

(2) SOURCE AND DATE RANGE: By entering a DODAAC or RIC and date range, you will get a print of all files which have been received from that activity during that time period. If you enter a date in the From date field only, the printout will include files received from the activity only for the date specified.

(3) DATE RANGE: By entering a date range, you will get a print of all files which have been sent during that time period. If you only enter a date in the From field, the printout will be just for that date.

(4) To print the entire input log, enter **X** in the appropriate field on the screen. The print will include all files on the log for a period of up to 10 days.

(5) After you make your selection and press <Esc>, the screen displays a message that your report has been sent to the Lettersize Forms Printer Queue for printing.

c. If the Lettersize Queue is on line, the Input Log (figure 18.3-18) begins printing. When the log is printed, give it to your supervisor for appropriate action.

```
DATE: MM/DD/YY                                  INPUT LOG                                  PCN-AJT032
SSA DODAAC:  W4546F                                                                        PAGE      1

                                                                                  PREV/
                                    RECORD      MEDIA    USER   DATE/TIME       NEXT
FROM      TO      SEQ#   FILE ID    COUNT       TYPE     ID     YYMMDDHHMMSS    SEQ#   REMARKS/STATUS

S2A       COM     00002  AJQ091     000000001   DISK     U999   910215095230           DATA WAS RECEIVED
S2A       COM     00002  AJQ091     000000004   DISK     U999   910215095233           SUCCESSFUL COMPLETION
```

Figure 18.3-18. Input Log

18.3.5.6 Inquire the Input Log (QINLOG). This selection allows you to perform inquiries to the Input Journal File. The Input Journal File maintains a log of actions taken on all files received for processing.

a. To begin an inquiry of the Input Journal File, enter **QINLOG** on the action line and press <Esc>. The next screen displays the Inquiry Input Log selections available (figure 18.3-19).

```
DATE: MM/DD/YY                          SARSS INQUIRY                          TIME: HH:MM:SS
                                        INPUT LOG


SOURCE .....

DATE RANGE (YY MM DD)..... FROM                TO

MEDIA TYPE .....          (A=COMMO, B=TAPE, C=DISKETTE)

TRANSACTION STATUS CODE.....   (SEE HELP FOR VALID CODES)

FILE ID .....

ENTER:  SOURCE or
        SOURCE and DATE RANGE or
        DATE RANGE or
        MEDIA TYPE or
        TRANSACTION STATUS CODE or
        FILE ID
Press <ESC> To Continue


ACTION:                  <=== ENTER COMMAND TO SELECT YOUR PROCESS                  SCREEN 1718
<HOME>=HELP              MENU = PREVIOUS MENU;  SMM = SARSS MASTER MENU;  LOGOUT = QUIT
```

Figure 18.3-19. Inquiry Input Log Selections

b. As you can see on the screen, the inquiry may be made in a number of ways.

(1) SOURCE: Enter the DODAAC or RIC of an activity; the screen displays all files which have been sent from that activity in the last 10 days.

(2) SOURCE AND DATE RANGE: By entering a source DODAAC or RIC and a date range, you get a display of all files which have been received from that activity during that time period. If you enter a date in the From field only, the screen displays data for that date only.

(3) DATE RANGE: By entering a date range, you get a display of all files which have been sent during that time period. If you enter a date in the From field only, you get a display of files sent on that date.

(4) MEDIA TYPE: By entering the media type, you only receive a display of those files which have been transmitted using that media. The Media Codes are displayed on the screen.

(5) TRANSACTION STATUS CODE: By entering a Transaction Status Code, you get a display of only those files which have that Status Code assigned. See appendix B and/or the Inquiry Input Log Help screen for valid codes.

(6) FILE ID: By entering a file ID, you get a display of all files input with that file ID.

c. Once you have made your selection, press <Esc>. The next screen displays the selected data (figure 18.3-20).

```
DATE: MM/DD/YY                          SARSS INPUT LOG INQUIRY                          TIME: HH:MM:SS



                                                          USER    MEDIA
SOURCE    DEST   FILEID    SEQ#  DATE/TIME                 ID     TYPE     REMARKS/STATUS
*******************************************************************************************

S2A       COM    AJQ091  00002   910215095230             U999    DISK     DATA WAS RECEIVED

S2A       COM    AJQ091  00002   910215095233     U999     DISK    SUCCESSFUL COMPLETION









No More Records
Press <Esc> To Continue
ACTION:                    <=== ENTER COMMAND TO SELECT YOUR PROCESS                    SCREEN 1719
<HOME>=HELP                MENU = PREVIOUS MENU; SMM = SARSS MASTER MENU; LOGOUT = QUIT
```

Figure 18.3-20. SARSS1 Input Log Inquiry Screen

18.3.5.7 Print Output Log (POUTLOG). Another selection on the Communication Log Utilities Menu allows you to print the Output Log. The Output Journal File maintains a log of the actions taken on all files created for output to other activities. The Output Log is printed automatically each time a Close-Out is run. Output logs that have been on the system for more than 10 days are deleted by Close-Out.

a. To print the Output Journal Log, enter **POUTLOG** on the action line and press <Esc>. The next screen allows you to select how the log will be printed (figure 18.3-21).

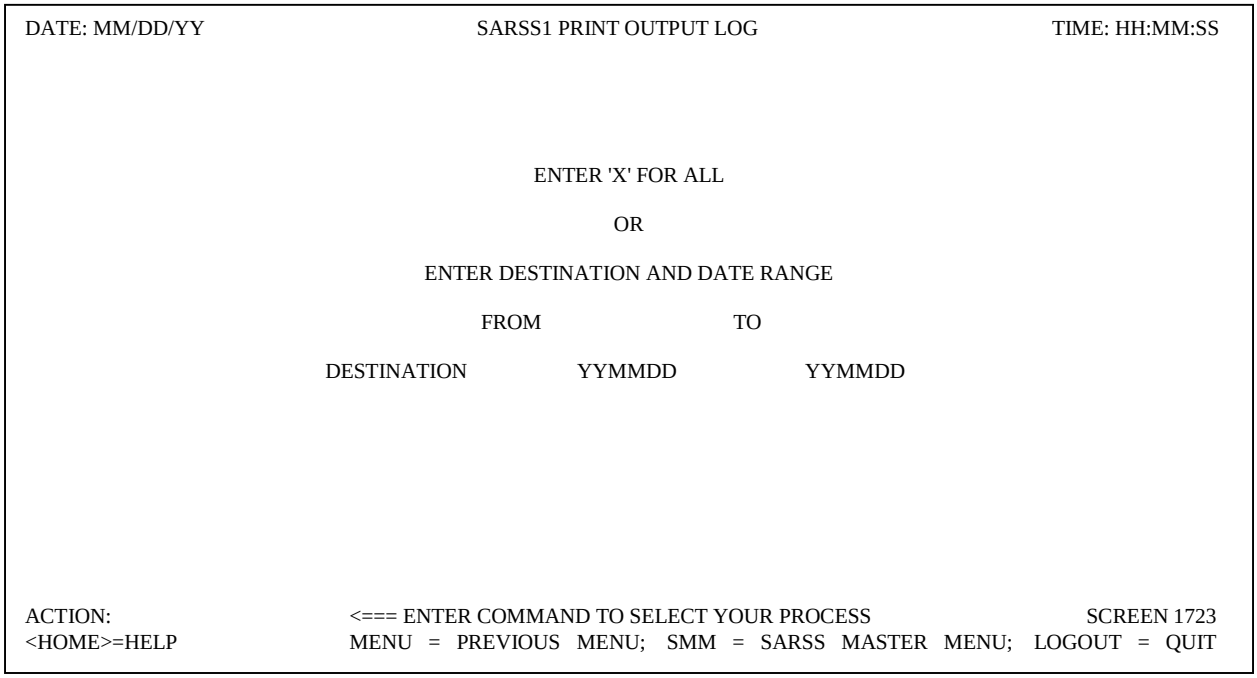

Figure 18.3-21. Print Output Log Option Screen

b. The log may be printed using various selections.

(1) DESTINATION: Enter the DODAAC or RIC of an activity to get a print of all files which have been sent to that activity.

(2) DESTINATION AND DATE RANGE: Enter a DODAAC or RIC and date range to get a print of all files which have been sent to that activity during that time period. If you only enter a date in the From field, the print will show data sent to that activity for the date selected.

(3) DATE RANGE: Enter a date range to get a print of all files which have been sent to that activity during that time period. If you enter a date in the From date only, the print will contain data for that date only.

(4) For a print of the entire Output Log, enter **X** in the appropriate field on the screen. The print will contain all files resident on the log for a period of up to 10 days.

(5) After you make your selection, press <Esc>. The screen displays a message that your report has been sent to the Lettersize Forms Printer Queue for printing.

c. If the LetterSize Queue is on line, the Output Log (figure 18.3-22) begins printing. When the log is printed, give it to your supervisor for appropriate action.

DATE: MM/DD/YY OUTPUT LOG PCN-AJT033
SSA DODAAC: W4546F PAGE 1

TO	FROM	SEQ#	FILE ID	RECORD COUNT	MEDIA TYPE	USER ID	DATE/TIME YYMMDDHHMMSS	REMARKS
AIR	COM		AJTS9A	000000001		U999	910215112542	
AIR	COM		AJTS9A	000000001	COMM	U999	910215111928	WAITING TO BE OUTPUT
B16	COM		AJTS9A	000000001		U999	910215112543	WAITING TO BE OUTPUT
B16	COM		AJTS9A	000000001	DISK	U999	910215111951	WAITING TO BE OUTPUT
B16	COM	00001	AJTS9A	000000001	DISK	U999	910215113729	DATA WAS SENT
B16	COM	00001	AJTS9A	000000001	DISK	U999	910215113730	SUCCESSFUL COMPLETION
S2A	COM		AJTS9A	000000060		U999	910215112543	SUCCESSFUL COMPLETION
S2A	COM		AJTS9A	000000060	COMM	U999	910215112019	WAITING TO BE OUTPUT
S2A	COM		AJTS9A	000000010	DISK	U999	910215130623	WAITING TO BE OUTPUT
S2A	COM	00001	AJTS9A	000000011	COMM	U999	910215113730	DATA WAS SENT
S2A	COM	00001	AJTS9A	000000011	COMM	U999	910215113731	SUCCESSFUL COMPLETION

Figure 18.3-22. Output Log

d. If there is no output, the system displays the message "No matching record."

18.3.5.8 Inquiry Output Log (QOUTLOG). This selection allows you to perform inquiries in the Output Journal File. The Output Journal File maintains a log of the actions taken on all files created for output to other activities.

a. To begin your inquiry of the Output Log, enter **QOUTLOG** on the action line and press <Esc>. The next screen displays options which you may use to perform your inquiry (figure 18.3-23).

```
DATE: MM/DD/YY                    SARSS INQUIRY                    TIME: HH:MM:SS
                                  OUTPUT LOG



DESTINATION.....

DATE RANGE (YY MM DD).....FROM              TO

MEDIA TYPE .....          (A=COMMO, B=TAPE, C=DISKETTE)

TRANSACTION STATUS CODE.....    (SEE HELP FOR VALID CODES)

FILE ID.....

ENTER:  DESTINATION or
        DESTINATION and DATE RANGE or
        DATE RANGE or
        MEDIA TYPE or
        TRANSACTION STATUS CODE or
        FILE ID
Press <ESC> To Continue


ACTION:                 <=== ENTER COMMAND TO SELECT YOUR PROCESS          SCREEN 1720
<HOME>=HELP             MENU = PREVIOUS MENU; SMM = SARSS MASTER MENU; LOGOUT = QUIT
```

Figure 18.3-23. Inquiry Output Log Selections

b. The inquiry may be made in the following ways:

(1) DESTINATION: Enter the DODAAC or RIC of an activity to display all files which have been sent to that activity.

(2) DESTINATION AND DATE RANGE: Enter a destination and date range to get a display of all files which have been sent to that activity during that time period. If you enter a date in the From field only, the inquiry will only display that date.

(3) DATE RANGE: Enter a date range to get a display of all files which have been sent during that time period. If you enter a date in the From field only, you get a display of files sent on that date.

(4) MEDIA TYPE: Enter the media type to get a display of only those files which have been transmitted by that medium. The Media Codes are displayed on the screen.

(5) TRANSACTION STATUS CODE: Enter a Transaction Status Code to get a display of only those files which have that Status Code assigned. See appendix B and/or the Inquiry Output Log Help screen for valid codes.

(6) FILE ID: Enter a file ID to get a display of files output with that file ID.

c. Once you have made your selection, press <Esc>. The next screen displays the selected data (figure 18.3-24).

DATE: MM/DD/YY SARSS OUTPUT LOG INQUIRY TIME: HH:MM:SS

SOURCE	DEST	FILEID	SEQ#	DATE/TIME	USER ID	MEDIA TYPE	REMARKS/STATUS
COM	S2A	AJTS9A		910215112543	U999	DISK	
COM	S2A	AJTS9A		910215112019	U999	COMMO	WAITING TO BE OUTPUT
COM	S2A	AJTS9A		910221513062	U999	DISK	WAITING TO BE OUTPUT
COM	S2A	AJTS9A	00001	910215113730	U999	COMMO	DATA WAS SENT
COM	S2A	AJTS9A	00001	910215113731	U999	COMMO	SUCCESSFUL COMPLETION
COM	S2A	AJTS9A	00002	910215131026	U999	DISK	DATA WAS SENT
COM	S2A	AJTS9A	00002	910215131026	U999	DISK	SUCCESSFUL COMPLETION

Press <Esc> To Continue
ACTION: <=== ENTER COMMAND TO SELECT YOUR PROCESS SCREEN 1721
<HOME>=HELP MENU = PREVIOUS MENU; SMM = SARSS MASTER MENU; LOGOUT = QUIT

Figure 18.3-24. Inquiry Output Log Display

18.3.6 Build Address/CMS Tables (BLDSTBL). This is the sixth selection on the SARSS1 Communication Menu. This process builds interface address and CMS Tables. It is used when errors such as "CMS Not Available" or "File Not for this SARSS1" (and the destination RIC is the processing SARSS1) appear on the screen. The process does not build routing tables. When executed, the process brings all workstations down; therefore, all workstations should be properly logged off to avoid file corruption.

18.4 SNR Error Handling. Sometimes the Network Router encounters problems when attempting to send or receive data through BLAST. System programming allows you to correct most of these errors. Screen messages identify the errors. The messages may appear on one of these screens: SNR Queue Monitor, SNR Error Handling, or Unrecoverable Error.

18.4.1 Error List Created by Transactions-In Process. SARSS1 creates an input error listing (figure 18.4.1) when it cannot place input transactions in the Transactions Pending Processing Files. This is caused by data in the transmission or on the diskette being incorrect in some way.

Bad Data File. These transactions were NOT processed.

AE1	21005000178806	EA00002WTUTRA10391002R	02	BB	AA	SAR	SARAIR91031
AE1	5306004080048	EA00001WTUTRA11500001R	02	BB	AA	SAR	SARAIR91150
AE1	5306004080048	EA00001WTUTRA11500002R	03	BB	AA	SAR	SARAIR91150

Figure 18.4-1. Error List from Trans-In

a. When the listing is created as a result of diskette input, forward the diskette and error listing to the originator so the data may be corrected and the diskette resubmitted.

b. Listings created as a result of a communications transfer are also returned to the originator. Write the date of receipt, batch number, and file ID on the listing so the originator may identify and correct the data and re-transmit.

18.4.2 SNR Queue Monitor Error Messages. As you scroll through the SNR Queue Monitor screens (SNRMON), you may find messages appearing in the Comment field (figure 18.4-2).

DATE: MM/DD/YY SARSS1 SNR QUEUE MONITOR TIME: HH:MM:SS

SNR FILE	Y	TARGET RECEIVE	Y
FILEID.....	AJTS9A	BACKUP	Y
SOURCE	WAE	CMS.....	A
DESTINATION.....	AWB	TARGET	AWB
STATUS DATA:		SEQUENCE CHECK:	
STAMP	080890141402	INDICATOR.....	Y
STATUS.....	X	NUMBER.....	00021
COMMENT	TERMINAL STATUS OCCURRED		

REMARKS ..... WAE TO AWB

SOURCE FILE SPEC..... [SYS]<SARSS1>FILES>AJTS9AAWB902200926

DESTINATION FILE SPEC..... [SYS]<SARSS1>FILES>AJTS9AAWB902200926

SCREEN 1710

<F3> Quit/ Menu ____ ____ <F6> Next Entry ____ ____ ____ <Home> Help/ Info

Figure 18.4-2. Comment Field With Error Message Screen

a. These messages may include, for example:

(1) Terminal Status Occurred.

(2) Destination Not Available.

(3) Not On Routing Table.

b. When these types of errors occur, check the Status field for the code entry. Look up the Status Code in the SARSS1 Users Manual, Section 6. This section provides explanations of the errors and instructions on how to recover from them.

18.4.3 SNR Error Handling Screens. Network Router errors may occur during SARSS1 processing of data into or out of the system. Identifying and correcting these errors must be done immediately to allow the specific process to run through to completion.

18.4.3.1 Errors in SNR During Transactions-In Processing. These types of errors are generally caused by receiving data not destined for your activity, or by receiving or attempting to process input files in the incorrect sequence.

a. The first type of error is caused by receiving a file that is not destined for your system. When the Network Router identifies a file that has a destination RIC other than your own, the screen in figure 18.4-3 appears. These errors occur when reading Transactions-In diskettes to your system. Follow the screen prompt and immediately forward the diskette to the appropriate activity.

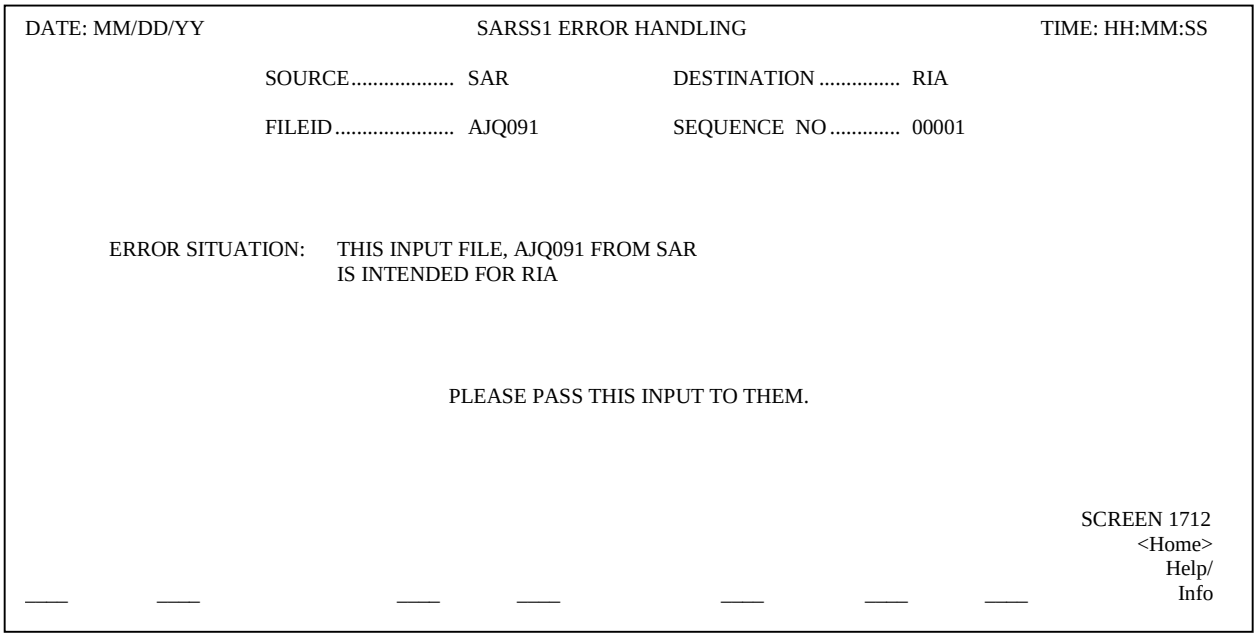

Figure 18.4-3. Incorrect Destination Error Message Screen

b. The second and more common type of error is associated with receipt of an incorrect sequence number on your system. It is recommended that an informal log of sequence numbers received from all sources be maintained. This will assist you in dealing with possible sequencing problems. Any time a sequence check error is encountered, refer to this log for the last sequence number received from that source.

(1) Sequence check errors cause an SNR Error Handling screen to appear with a sequence message in the Comment field (figure 18.4-4). An error situation message is also displayed in the lower portion of the screen.

```
DATE: MM/DD/YY                    SNR ERROR HANDLING                    TIME: HH:MM:SS

                    SOURCE..... SAR          DESTINATION..... AIR

                    FILEID..... AJQ091       CMS..... C

                    SEQUENCE CHECK DATA:     STATUS DATA:
                      INDICATOR..... Y       STAMP..... 080690154921
                      NUMBER..... 00001      STATUS ..... D
                                             COMMENT... DUPLICATE SEQ CHK
                    REMARKS ..... SAR      TO AIR
 SOURCE FILE SPEC:
[SYS]<SNR>SAR>051090115152
 DESTINATION FILE SPEC:
[SYS]<SARSS1>FILES>AJQ091>AIR>080690154916


      ERROR SITUATION: DUPLICATE SEQUENCE CHECK


                                                                    SCREEN 1700
          <F3>    <F4>    <F5>    <F6>    <F7>                      <Home>
          Quit/   Re-Try  Cancel  Skip    Accept                    Help/
____ ____ Menu    Entry   Entry   Entry   Entry   ____ ____         Info
```

Figure 18.4-4. Sequence Check Error Situation Screen

(2) Types of sequence check errors include receipt of a duplicate sequence number, a sequence number which is less than the last sequence received, or a sequence number that is greater than the next sequence number expected. If, after checking your log, you find that the error message is correct, call the source of the data file. Attempt to find out what the correct sequence number should be.

(3) Based on the response provided by the source of the data file, use the function keys on your system to correct and respond to the error.

(a) <F3>-Quit/Menu: Press this key to quit SNRMON.

(b) <F4>-Re-Try Entry: Use this key to attempt to read the diskette of transmission data into the system if the first attempt failed.

(c) <F5>-Cancel Entry: Use this key when you determine that the sequence number received should not be read into the system at this time. This selection erases the entry from the SNR Queue Monitor. Use this key when you have received duplicate input data.

(d) <F6>-Skip Entry: Use this key when data files have been received by the Network Router in the incorrect sequence. Input diskettes and data transmissions must be processed into SARSS1 in the sequence in which they were created. Skip the entry until you arrive at the next correct sequence number.

(e) <F7>-Accept Entry: When several files are present in the Network Router in the wrong sequence, press this key to accept the sequence number shown on the screen for input to SARSS1. Use a combination of the <F6> and <F7> keys to read the data files into the system in the proper sequence.

(4) Use the <F3> (Quit/Menu) key to exit the process, if necessary.

18.4.3.2 Errors in SNR During Transactions-Out/Customer-Out Processing. The Transactions-Out and Customer-Out Processes (either stand-alone processing or during Close-Out) may also create a Network Router error situation.

a. There will be occasions when an attempted transmission fails because BLAST timed out. This means that an attempt at auto dial was unsuccessful because the system used up all its numbered attempts or allotted time.

(1) When a time-out situation occurs, an SNR Error Handling screen for that data file is displayed (figure 18.4-5) the next time Network Router is made active. The screen will display a "Terminal Status Occurred" message in the Comment field.

```
DATE: MM/DD/YY                    SNR ERROR HANDLING                    TIME: HH:MM:SS

                    SOURCE ..... WAI          DESTINATION ..... WAI

                    FILEID ..... AJTS9A       CMS ..... A

                    SEQUENCE CHECK DATA:      STATUS DATA:
                      INDICATOR..... Y        STAMP ..... 080890102143
                      NUMBER ..... 00002      STATUS..... X
                                              COMMENT ... TERMINAL STATUS OCCURRED
                    REMARKS..... WAI          TO WAI
 SOURCE FILE SPEC:
[SYS]<SARSS1>FILES>AJTS9AWAI 902192016
 DESTINATION FILE SPEC:
[SYS]<SARSS1>FILES>AJTS9AWAI 902192016


        ERROR SITUATION: AJV FAILED - REVIEW SNR HISTORY LOG TO DETERMINE ERROR


                                                                        SCREEN 1700
          <F3>    <F4>     <F5>    <F6>    <F7>                        <Home>
          Quit/   Re-Try   Cancel  Skip    Accept                      Help/
____ ____ Menu    Entry    Entry   Entry   Entry   ____ ____           Info
```

Figure 18.4-5. Terminal Status Occurred Screen

(2) There are two possible ways to correct this situation.

(a) Press the <F4> (Re-Try Entry) function key. This causes the Network Router to attempt to transmit only this data file again.

(b) Use the <F8> (Change To Diskette) function key if repeated attempts to transmit the file have failed. The system prompts you to insert a formatted diskette, reads the file onto the diskette, and allows you to send the data to the destination on diskette.

b. Sometimes when using either the CUSTOUT or TRANOUT command, a destination ID (RIC-TO or DODAAC) may not appear on the Network Router Table resident to the system. When this occurs, an error screen is displayed allowing you to update the Network Router Table. This screen includes entries which allow you to use BLAST communications features (figure 18.4-6). Refer to paragraph 18.3.2 for details on completing these entries.

```
DATE: MM/DD/YY                    CREATE ROUTING TABLE                    TIME: HH:MM:SS

      SOURCE..... WTUTRA      DESTINATION..... WAL          FILEID..... AJH82

      COMMUNICATION TYPE:  DISKETTE (D)
      /POINT TO POINT  (P)  /CAISI-VEE   (V)  /FTP   (F)

      FOR POINT TO POINT (PTP) ENTER:
            TELEPHONE NUMBER OR M FOR MANUAL PTP:

                  MAX ATTEMPTS:  00010 START TIME:  0000

      IF CAISI-VEE WAS SELECTED ENTER:
            DESTINATION ADDRESS OR (M) FOR MANUAL:

NOTE: THE ABOVE INFORMATION IS REQUIRED TO BUILD A ROUTING TABLE ENTRY.

                              PRESS <ESC> TO CONTINUE




                                                                  SCREEN 1705
```

Figure 18.4-6. Routing Table Entry Required Screen

18.4.4 Unrecoverable Error Message Screens. There are occasions when an error is caused in the Network Router because the data file created by SARSS1 contains an error. This type of error may occur during use of either the Transactions-In or Transactions-Out Process.

a. A SARSS1 error encountered by the Network Router may cause an error screen to come up as a SARSS1 Error screen (figure 18.4-7) or a DOS CMS Interface Error screen (figure 18.4-8).

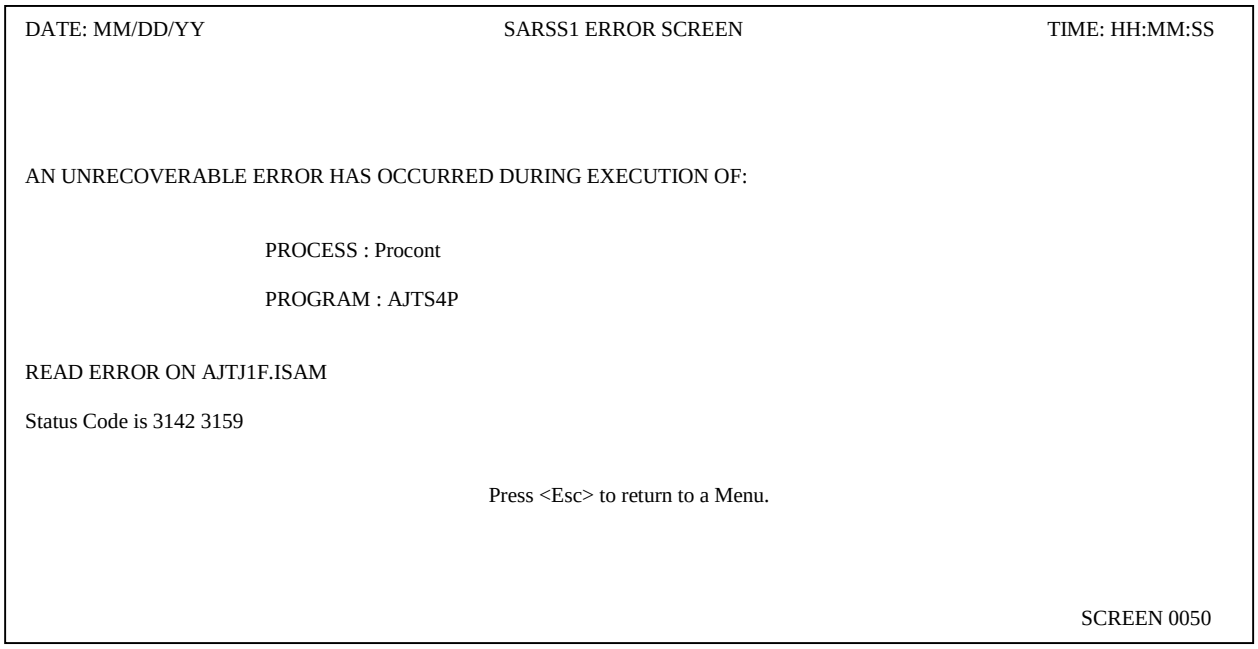

Figure 18.4-7. SARSS1 Error Screen

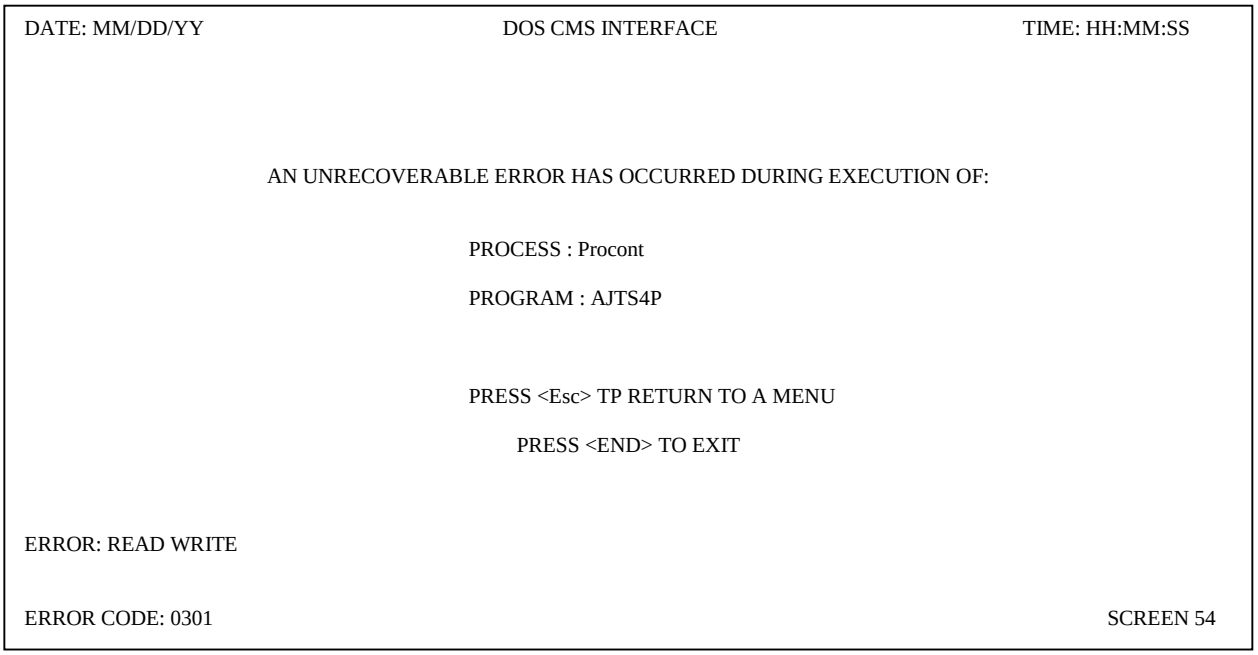

Figure 18.4-8. DOS CMS Interface Error Screen

b. When an error of this type occurs, notify your supervisor immediately for corrective action. These types of errors are associated with SARSS1 system problems and may require further technical assistance for correction.

18.5 FTP Utilities (FTPUTIL). The final selection on the SARSS1 Communications Menu, FTPUTIL, provides you with access to several processes which are used to configure and update the FTP communications package. To view the FTP Utilities Menu, enter **FTPUTIL** on the action line and press <Esc>. The system displays the screen in figure 18.5-1.

```
DATE: MM/DD/YY                    SARSS1 FTP UTILITY MENU                    TIME: HH:MM:SS


                    COMMAND            FTP UTILITY PROCESSES
                    +++++++++      ++++++++++++++++++++++++++++++++++++++++++++

                    FTPMON         <=== DISPLAY FTP QUEUE ENTRIES

                    FTPUSER        <=== ADD/CHANGE/DELETE FTP OUTBOUND USER

                    FTPALI         <=== ADD/CHANGE/DELETE FTP ALIAS USER

                    FTPPASS        <=== ADD/CHANGE/DELETE FTP USER LOGINS

                    CONFTP         <=== CONFIGURE FTP

                    ACCESS         <=== SYSTEM ACCESS MAINTENANCE




ACTION:                      <=== ENTER COMMAND TO SELECT YOUR PROCESS                SCREEN 0010
<HOME>=HELP                  MENU = PREVIOUS MENU; SMM = SARSS MASTER MENU; LOGOUT = QUIT
```

Figure 18.5-1. FTP Utilities Menu

18.5.1 Display FTP Queue Entries (FTPMON). The FTPMON command allows you to view any outbound FTP queue entries and to fail outbound FTP queue entries when required. To begin the process, enter **FTPMON** on the action line and press <Esc>. The system displays the screen in figure 18.5-2.

```
DATE: MM/DD/YY                  SARSS1 FTP QUEUE MONITOR                  TIME: HH:MM:SS

                    FILEID.....                 ENTRY STATUS .....
                    STATUS COMMENT
                    SOURCE.....                 LAST ACTIVITY.....

                    DESTINATION.....            SEQUENCE NUMBER...

                    PHONE NUMBER

        SOURCE FILE SPEC.....

        DESTINATION FILE SPEC .....

FIRST CHANCE DATE/TIME.                                 MAX ATTEMPTS:
LAST CHANCE DATE/TIME..
LAST STATUS DATE/TIME..                                 ATTEMPTS:

                              End Of FTP Queue Entries

                                                                        SCREEN 1752
          <F3>                      <F6>                <F8>              <Home>
          Quit/                     Next                Fail              Help/
____ ____ Menu      ____ ____       Entry ____          Entry       ____  Info
```

Figure 18.5-2. SARSS1 FTP Queue Monitor

a. This screen displays the following information for FTP queue entries:

(1) FILE ID: This is the name of the file queued for transmission.

(2) ENTRY STATUS: This is the current status of the entry.

(3) STATUS COMMENT: If an error has occurred, the explanation for the type of error is contained in this field.

(4) SOURCE: This is the RIC/DODAAC of the activity that originated the file transfer.

(5) DESTINATION: This is the RIC/DODAAC of the receiving activity. If this is your RIC, the SNR is not running and corrective action must be taken. Run the BLDSTBL process and then recheck to see whether the entry has been moved. If the entry is still in the queue, call the CAO for assistance.

(6) SEQUENCE NUMBER: This is the batch number assigned to the file that is being sent.

(7) IP ADDRESS: This is the FTP address of the activity to which the file is being sent.

b. The function keys on this screen perform several functions:

(1) <F3> Quit/ Menu: Use this key to quit or exit this process.

(2) <F6> Next Entry: Use this key to view the next FTP queue entry. When you have reached the end of the queue, the message "End of FTP Queue Entries" will flash on the screen.

(3) <F8> Fail Entry: Use this key to fail an FTP entry so the information can be changed or the entry canceled. To change information for a specific entry, fail the entry and then use the UPDRT command to change routing information. Once the information is changed, execute the SNR process and retry the entry. This will create a new entry with the new information in the appropriate queue. To cancel an entry, fail the entry and then execute the SNR process, which cancels the entry when it appears.

18.5.2 Add/Change/Delete FTP Outbound User (FTPUSER). This process allows you to add, change, or delete the FTP user information that provides you with access to other SARSS activities for file transfer over the FTP network. Currently, this process is only used for SARSS activities. For customer activities who have access to the FTP network, use the FTPPASS process. To access this process, enter **FTPUSER** on the action line and press <Esc>. The system displays the screen in figure 18.5-3.

```
DATE: MM/DD/YY                    FTP USER INFORMATION                    TIME: HH:MM:SS

                          ENTER THE FOLLOWING INFORMATION:

                          DESTINATION RIC/DODAAC. S2A

                     **** SOURCE LOGIN NAME ..... SARSS2

                     **** SOURCE PASSWORD.....

                          DESTINATION IP ADDRESS... 156.155.75.22


                **** THIS IS YOUR LOGIN INTO THE DESTINATION RIC/DODAAC

                             PRESS <Esc> TO CONTINUE




                                                                    SCREEN 1754


  <F1>     <F2>    <F3>    <F4>     <F5>     <F6>    <F7>     <F8>      <Home>
  Clear    Add     Quit/   Delete   Change   Next    Create   Find      Help/
  Screen   Entry   Menu    Entry    Entry    Entry   Alias    Ric/Dodaac Info
```

Figure 18.5-3. FTP User Information Screen

a. You must enter address, login, and password information for each receiving activity. Before beginning this process, obtain the necessary information from the destination activity. The following entries are required to establish communications over the FTP network with another user activity:

(1) DESTINATION RIC/DODAAC: This is the RIC/DODAAC of the system to which you will transmit files.

(2) SOURCE LOGIN NAME: This is your assigned login to the destination system.

(3) SOURCE PASSWORD: This is your assigned password for the destination system. The password will not appear as you enter it.

(4) DESTINATION IP ADDRESS: This is the IP address of the system to which you will transmit and receive files from. The IP address will be automatically included in the allowable address file.

b. This screen displays several function keys for use as follows:

(1) <F1> Clear Screen: Use this key to clear the screen and remove all unwanted entries. This does not update or delete any data.

(2) <F2> Add Entry: Use this key to add a new FTP user and the information for that user as shown on the screen. When you press this key, the system will edit the entries and prompt you to enter the password for the destination RIC/DODAAC. You will not be able to see the password as you enter it. If the destination activity has not created an FTP user login and password for your activity, you will not be able to transmit files to that activity.

(3) <F3> Quit Menu: Use this key to quit or exit this process without updating or deleting current information.

(4) <F4> Delete Entry: Use this key to delete a previously created FTP user. You must enter the destination RIC/DODAAC before using this function key.

(5) <F5> Change Entry: Use this key to change the existing information for an FTP user. First, locate the entry by using the <F6> or <F8> key. When you press <F5>, the system will prompt you to enter the password for the destination RIC/DODAAC. You will not be able to see the password as you enter it.

(6) <F6> Next Entry: Use this key to scan through the entries. Each time you press this key, the system will display the next entry.

(7) <F7> Create Alias: Use this key to create an alias from the data entered on the screen for the destination RIC/DODAAC. During file transfer, the system will pull files for all RICs and DODAACs associated with the alias for transmission.

(8) <F8> Find RIC/DODAAC: Use this key to locate the FTP user information record for the entered RIC or DODAAC.

18.5.3 Add/Change/Delete FTP Alias User (FTPALI). This option allows you to create an FTP alias for a computer system used by more than one activity. For example, many Unit Level Logistic Systems (ULLS) have multiple DODAACs on one computer and must be configured to send and receive files for more than one DODAAC. Building an FTP alias allows those systems to retrieve and transmit the files for all associated DODAACs when the SARSS1 activity sends files to, and receives files from, the alias. To access the FTP alias process, enter **FTPALI** on the action line and press <Esc>. The system displays the screen in figure 18.5-4.

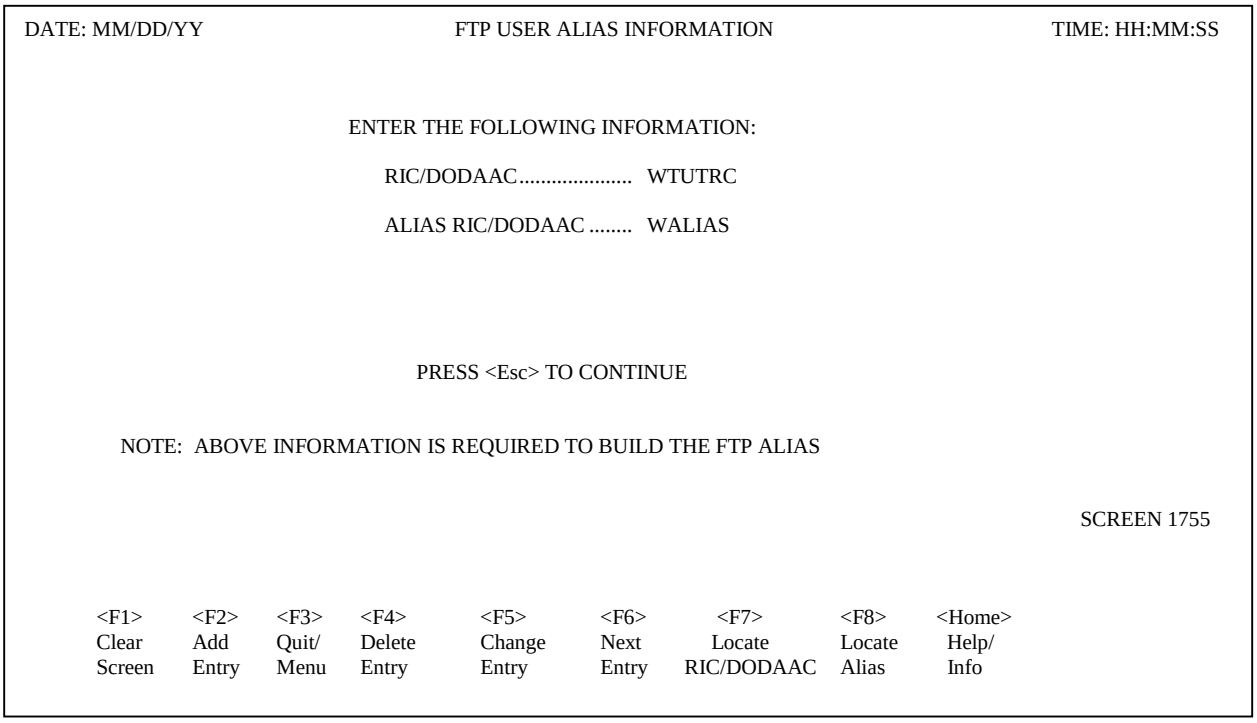

Figure 18.5-4. FTP User Alias Information Screen

a. The following entries are required in order to establish or update an FTP alias:

(1) RIC/DODAAC: This is the RIC/DODAAC of the destination activity.

(2) ALIAS RIC/DODAAC: This is the RIC/DODAAC that will be used during FTP file transfers. All RICs/DODAACs with this alias will have their files picked up and transmitted by the alias RIC/DODAAC.

b. The following function keys are available on this screen:

(1) <F1> Clear Screen: Use this key to clear the screen and remove all unwanted data. It does not update or delete data.

(2) <F2> Add Entry: After completing entries on the screen, use this key to add a new FTP alias. The system will use the entered information for file transfers for all DODAACs associated with this alias.

(3) <F3> Quit Menu: Use this key to quit or exit this process without updating or deleting current information.

(4) <F4> Delete Entry: Use this key to delete a previously created FTP alias. You must enter the RIC/DODAAC before using this function key.

(5) <F5> Change Entry: Use this key to change/update information for an FTP alias. You must first locate the correct record by using the <F6>, <F7>, or <F8> function keys.

(6) <F6> Next Entry: Use this key to scan through the existing records to locate the desired record. Each time you press this key, the system will display the next record.

(7) <F7> Locate RIC/DODAAC: Use this key to retrieve the alias information for a particular RIC or DODAAC. You must first enter the RIC/DODAAC for this to function properly.

(8) <F8> Locate Alias: Use this key to retrieve the information for a particular alias RIC or DODAAC. You must first enter the alias RIC/DODAAC for this to function properly.

18.5.4 Add/Change/Delete FTP User Logins (FTPPASS). This option allows you to add, change, or delete user login, password, and IP address information for each activity that will need access to your SARSS1 system for file transfer. To execute the File Transfer Protocol Login/Password Maintenance Process, enter **FTPPASS** on the action line and press <Esc>. The system displays the screen in figure 18.5-5.

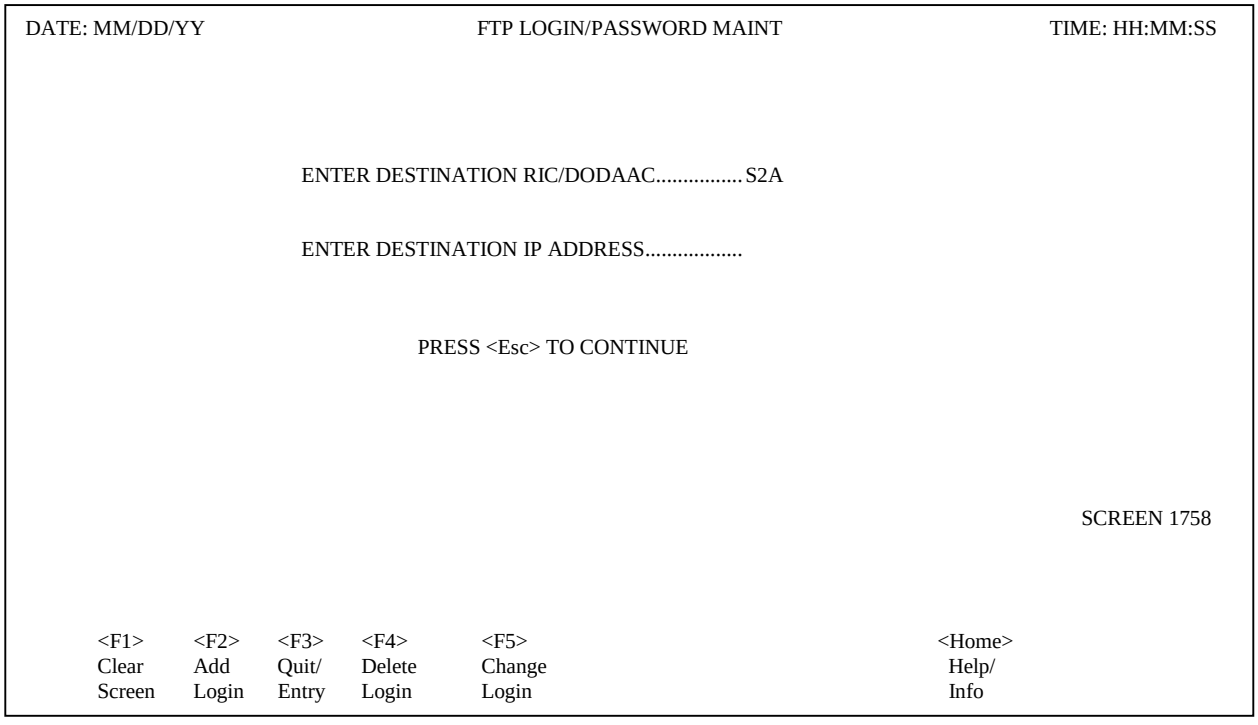

Figure 18.5-5. FTP Login/Password Maintenance Screen

a. The entries on this screen allow the FTP user to access your SARSS1 system to send and retrieve files. After entering the required data on this screen, provide the login and password to each activity so the information can be entered into their systems. Only FTP users with valid logins and passwords and whose IP address is included in the allowable address file will be able to transmit or pick up files.

b. This process runs automatically when you create or update a routing table for FTP as the communication type. Access this process using the FTPPASS command if FTP is not currently the type of communication indicated on the activity's routing table, or if you wish to change or delete the assigned login and/or password. You must enter the destination RIC/DODAAC to initiate this process.

c. The function keys on this screen allow you to perform several functions:

(1) <F1> Clear Screen: Use this key to clear the screen and remove all unwanted data.

(2) <F2> Add Login: Use this key to add login/password information for an FTP user. When you press this key, the system will prompt you to enter a password for the entered RIC/DODAAC. You will not see the password as you type it, but it is recorded in the files.

(3) <F3> Quit Menu: Use this key to quit or exit this process without updating or deleting current information.

(4) <F4> Delete Login: Use this key to delete a previously created FTP user login. You must first enter the destination RIC/DODAAC for this to function properly.

(5) <F5> Change Login: Use this key to change the login/password information for an FTP user. When you press this key, the system will prompt you to enter a password for the entered RIC/DODAAC. You will not see the password as you type it, but it is recorded in the files.

18.5.5 Configure FTP (CONFTP). This command allows you to set up your SARSS1 system for FTP communication. Many of the entries required for this process are assigned by the DOIM. Before attempting to execute this process, contact the DOIM or your installation system/network administrator to obtain the necessary information. When you are ready to begin, enter **CONFTP** on the action line and press <Esc>. The system displays the screen in figure 18.5-6.

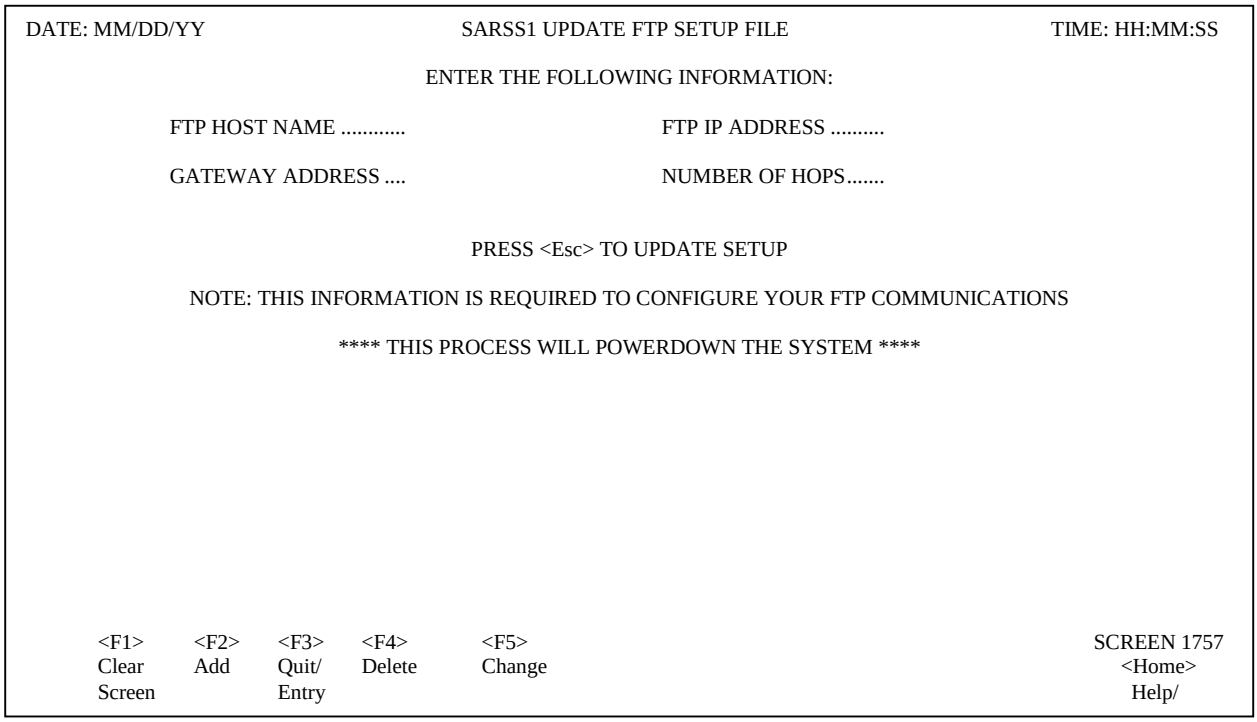

Figure 18.5-6. SARSS1 Update FTP Setup File Screen

a. The following entries must be made on this screen:

(1) FTP HOST NAME: This is the unique name by which your system is known to the network. This should be your RIC or DODAAC.

(2) FTP IP ADDRESS: This is the Internet Protocol (IP) address for your activity. It is assigned by the DOIM.

(3) GATEWAY ADDRESS: This is another DOIM-assigned address which is used for a router.

(4) NUMBER OF HOPS: This is a numeric entry which lets the network know the number of jumps that must be taken to get to the gateway destination. This entry is assigned to your activity by the DOIM.

b. The following function keys are available for use on this screen:

(1) <F1> Clear Screen: Use this key to clear the screen and remove all unwanted data.

(2) <F2> Add: Use this key to update your current network file with the entered information. When you press this key, the system will be brought down and then back up again. This resets the system configuration to work with the new information.

(3) <F3> Quit/Menu: Use this key to quit or exit this process without updating or deleting current information.

(4) <F4> Delete: Use this key to delete a previously created FTP host name that is no longer being used.

(5) <F5> Change: Use this key to change the displayed information and update your current network file with the new information. When you press this key, the system will be brought down and then back up again. This resets the system configuration to work with the new information.

18.5.6 System Access Maintenance (ACCESS). This command will allow you to establish a security host file of all IP addresses that will have valid access to the SARSS1 system via FTP or TELNET. IP addresses can be added or deleted and be given permission for FTP ONLY, TELNET ONLY, or for both FTP and TELNET access. The system displays the screen in figure 18.5-7.

DATE: MM/DD/YY SARSS1 HOSTS ALLOW/DENY EDITS TIME: HH:MM:SS

IP ADDRESS: 128.127.36.01

..... TYPE OF ENTRY: 1 TELNET AND FTP
..... (1 –FTP and TCP, 2 – FTP ONLY, 3 –TCP ONLY)

NOTE: You may NOT delete any SARSS1 Workstations or Server IP's
from the hosts.allow file, you may only modify their IP address.

<F1>	<F2>	<F3>	<F4>	<F5>	<F6>	<F7>	<F8>
FIRST ENTRY	LAST ENTRY	QUIT	NEXT ENTRY	PREV ENTRY	ADD IP	DELETE IP	CHANGE IP

Figure 18.5-7. SARSS Hosts Allow/Deny Edits

a. The following entries must be made on this screen:

(1) IP ADDRESS: This is the IP address of the activity that is being given permission to access the SARSS1 system.

(2) TYPE OF ENTRY: This entry will identify the type of access being allowed. Enter '1' for FTP and TCP access. Enter '2' for FTP ONLY or enter '3' for TCP ONLY.

b. The following function keys are available for use on this screen:

(1) <F1> FIRST ENTRY: Use this key to locate the first entry on the hosts.allow file.

(2) <F2> LAST ENTRY: Use this key to locate the last entry on the hosts.allow file.

(3) <F3> QUIT: Use this key to quit or exit this process without updating or deleting current information.

(4) <F4> NEXT ENTRY: Use this key to scan the entries on the hosts.allow file.

(5) <F5> PREV ENTRY: Use this key to return to a previous entry during the scan of the hosts.allow file.

(6) <F6> ADD IP: Use this key to add a new IP address to the hosts.allow file.

(7) <F7> DELETE IP: Use this key to delete an IP address from the hosts.allow file.

(8) <F8> CHANGE IP: Use this key to change an existing IP address.